

PROJECT GATE SELF-ASSURANCE REVIEW FRAMEWORK
FOR MAJOR ALASKAN OIL AND GAS PROJECTS

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FOR MAJOR ALASKAN OIL AND GAS PROJECTS

A
PROJECT

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of the University of Alaska Anchorage

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By

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Abstract

Major Alaska oil and gas capital projects can fail or have poor outcomes, including significant cost and schedule overruns if the projects are not ready to proceed into subsequent project stages. A comprehensive project gate assurance review ensures their readiness for the next project gate. Internal Subject Matter Experts (SMEs) should be leveraged in the review process to determine whether all design, construction, commissioning, and operational issues have been formally and properly addressed by the project team.

A new project gate Self-Assurance Review Framework (SARF) applicable to major Alaskan oil and gas companies to improve project delivery is proposed in this product-related paper. Given the current economic climate, there is a merit in using internal project gate self-assurance, which is premised to be more time and cost efficient. This can be accomplished by using an Alaskan local internal assurance review team rather than a corporate external travel team of reviewers. The assurance protocol is a “cold eyes” review with SMEs at the main approval gates to ensure the project team has considered all aspects of project readiness. This is to assure the project will be successfully and safely executed on budget, on schedule, and within scope.

While external consultants are available to conduct such reviews, this process is designed as an internal local assurance review process in order to generate a beneficial improvement cycle employing internal local SMEs who are accustomed and familiar with the execution of Arctic projects. They are familiar with prior project successes and failures. There are both cost and quality efficiencies to be realized with this approach by leveraging local expertise rather than external reviewers.

This paper includes a literature review of assurance review practices, followed by a summary and analysis of interviews conducted with local Alaskan project professionals. These professionals are experienced with major projects delivery and were personally interviewed using guidelines written for this project.

Key Words:

Assurance Review Process
Assurance Review Framework
Funding Gates Approval
Gate reviews
Project Go/ No-Go Decision

Disclaimer: The work done for this project is for an independent academic endeavor only. The document contains obscured identity references in order to maintain confidentiality of the information and its sources

Table of Contents

	Page
Abstract.....	3
List of Exhibits	5
List of Appendices	6
Executive Summary.....	7
Introduction	9
Project Objective	10
Project Background	11
Research	12
Literature Review	12
Interviews	18
Analysis	22
Project Gate Self-Assurance Review Framework.....	23
Conclusion.....	26
Recommendations	26
Lessons Learned	28
Glossary of Terms	29
References	30
Appendices	31

List of Exhibits

	Page
Exhibit 1: Proposed project gate self-assurance framework and timeline	8
Exhibit 2: The typical risks that affect an organization’s ability to deliver to Final Investment Decision (FID) (EY, 2014).....	9
Exhibit 3: New North Slope Drillsite Development “Greater Mooses Tooth 1” (ConocoPhillips, 2015).....	10
Exhibit 4: Project Constraints	11
Exhibit 5: Project gate assurance role.....	13
Exhibit 6: Fully description of a project cycle (AIMS, 2015)	14
Exhibit 7: Good practice stage gate process (Suresh, Dutto, Kruse, Rogers, 2013)	15
Exhibit 8: Project Decision Gate Approval Process (OJK, 2012)	15
Exhibit 9: The link between influence over costs and the project stages (EY, 2014).....	16
Exhibit 10: Good practice project governance and assurance (Suresh, Dutto, Kruse, Rogers, 2013)	24
Exhibit 11: Proposed project gate self-assurance review framework high level work flow	25
Exhibit 12: Proposed project gate self-assurance framework and timeline	26

List of Appendices

	Page
Appendix 1. Self-Assurance Framework.....	31
Appendix 2. Consent Form.....	32
Appendix 3. Project Interview Protocol	34

Executive Summary

This product-related paper delivers a new project gate Self-Assurance Review Framework (SARF) applicable to major Alaskan oil and gas companies seeking to improve project delivery. The assurance protocol is a “cold eyes” independent review, performed by Alaskan-based local internal subject matter experts (SMEs). It is to be performed at the main approval gates to ensure the project team has considered all aspects of project readiness and to assure the project will be successfully executed on budget, on schedule, and within scope.

While corporate external consultants are available to conduct such reviews, this new proposed process is primarily designed as an internal local assurance review process in order to generate a beneficial improvement cycle by employing local internal SMEs who are accustomed to and familiar with the execution of Arctic projects, and with prior project successes and failures. There are costs and quality efficiencies to be realized with this approach by designed to leverage local expertise.

The main questions that needed to be answered in order to create a more efficient project gate self-assurance review framework for major oil and gas projects in Alaska were:

- What are project gate assurance reviews?
- Why are assurance reviews important?
- What are the challenges associated with assurance reviews?
- How can the project reviews be streamlined in order to save cost and time in the current economic climate?
- What key recommendations will improve an assurance review process?

The research methods employed for this product-based project included both a literature review and interviews.

A literature review was conducted in order to gain understanding of what traditional project gate assurance reviews are, what the benefits are of performing assurance reviews prior to project gate approvals, and what the current challenges are with different review cycles and methodologies available.

In order to gather the necessary experienced-based knowledge to determine the criteria and content of the project gate SARF, interviews with local Alaskan project professionals experienced in major projects delivery were completed during summer 2015 in accordance with the project management plan.

The data collected from the literature review and interviews were used to develop the project gate SARF that is appropriate for the current oil price environment and fit for purpose for major Alaskan oil and gas companies.

The proposed project gate SARF shown in Exhibit 1 is defined primarily for major oil and gas projects of a total installed cost of one hundred million dollars US (\$100 MM) or above and having a scope typical of North Slope repetitive projects. For example, new facilities, pipelines, drill sites, and infrastructure upgrades typically fit in this installed cost category. The project gate SARF proposed in this project can be employed by Alaskan oil and gas companies to provide cost effective project assurance for their repetitive projects. This project concluded that assurance reviews are valuable and worth performing, especially when using local internal SMEs, as they provide logistical, financial, and technical advantages to the project. The project management professionals interviewed, project sponsor, and project advisory committee have reviewed and conceptually approved the conclusions drawn in this project.

For one of a kind projects not typically executed on the North Slope (e.g., bridges, power generation, etc.), assurance reviews should still be conducted through a third party specialized in that particular type of project assurance review. To fully realize the benefits of recommendations offered in project, additional work on a new detailed assurance procedure is recommended based on the project gate SARF proposed. The procedure should have the following items well clarified and addressed:

- Selection process for assurance review team (ART)
- Decision on ART funding
- Documentation required for assurance review based on company project management processes
- Clear expectations regarding the review

- Categorization of findings (low, medium, high) and consequences
- Standardized template or score card for evaluating all disciplines, which defines key deliverables needed by particular phase gate

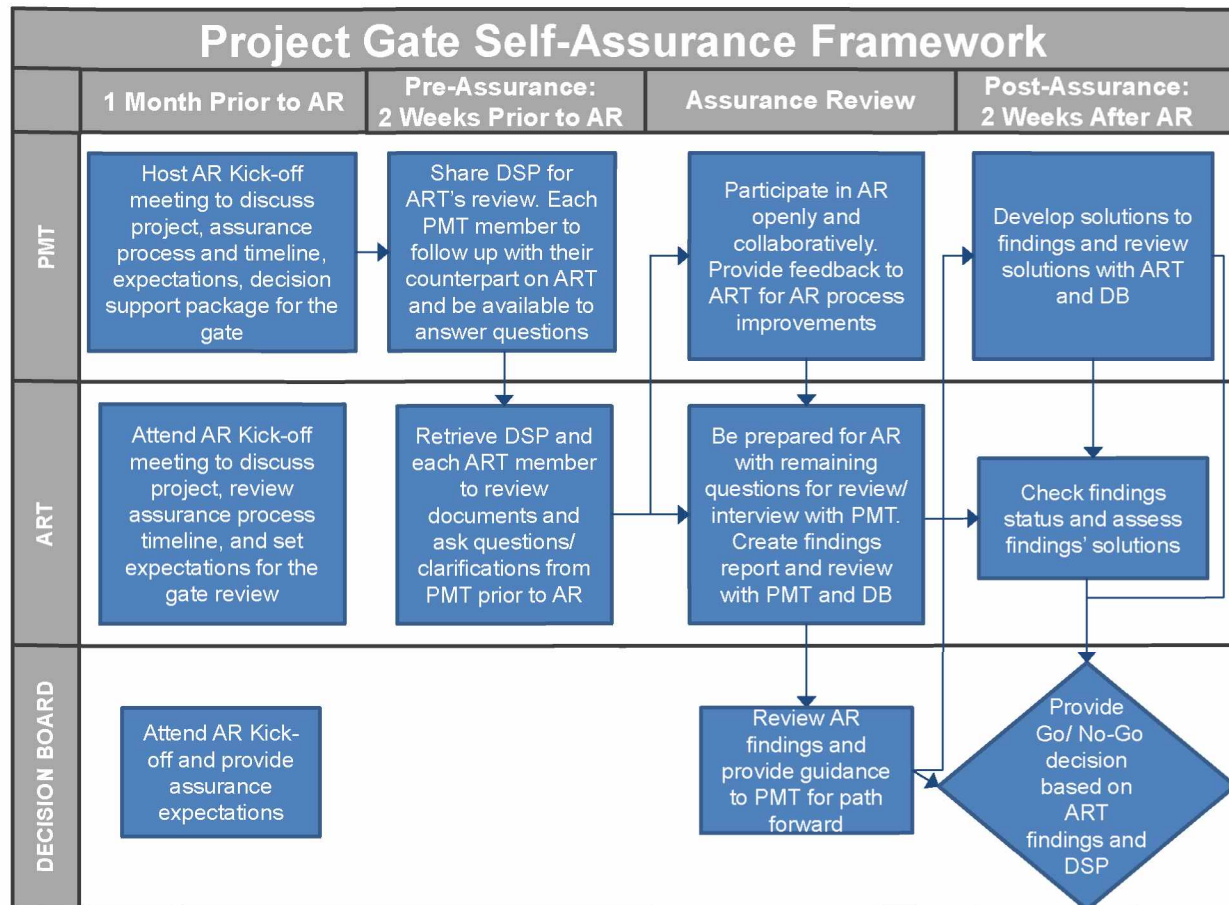


EXHIBIT 1: PROPOSED PROJECT GATE SELF-ASSURANCE FRAMEWORK AND TIMELINE

Introduction

Major projects are currently being planned and are in progress in the upstream oil and gas industry in Alaska. These projects are driven by ongoing demand for oil and gas in the world. In the current oil price environment, many companies need to reevaluate their local business unit processes used to ensure effective management and project assurance.

As can be seen in Exhibit 2 per Ernst and Young survey findings, inadequate project readiness represents the highest risks, which affects a company's project performance delivery per plan. It is therefore good business practice to perform a project assurance review that informs a Go/ No-Go decision by the company decision board to determine the degree of project readiness prior to commencing the next project phase.

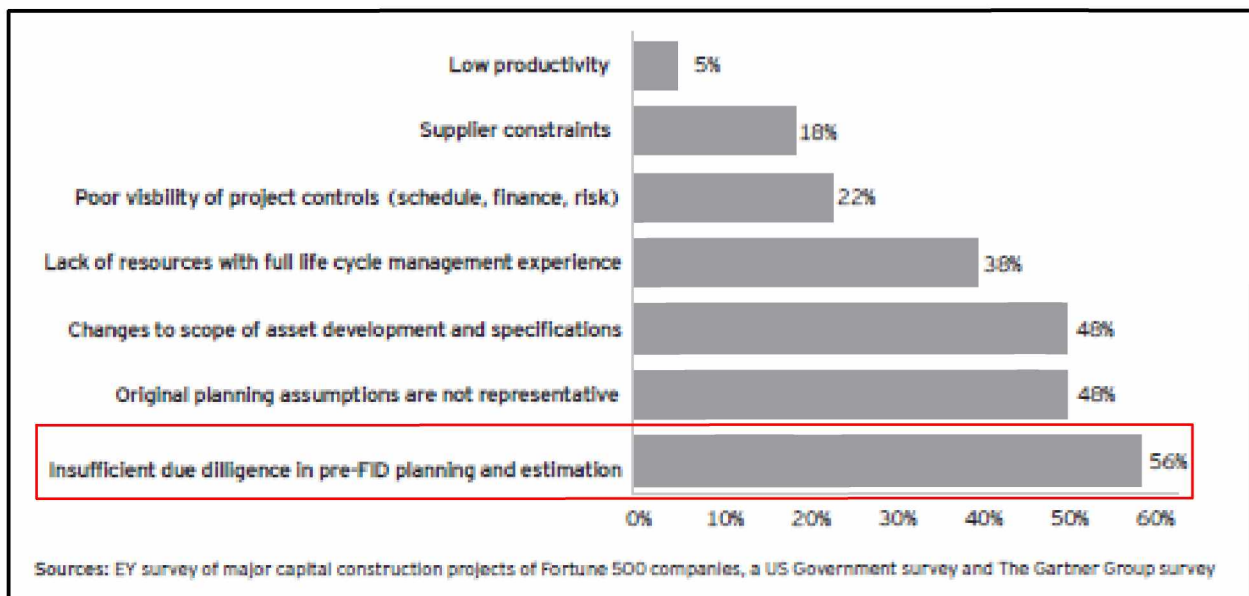


EXHIBIT 2: THE TYPICAL RISKS THAT AFFECT AN ORGANIZATION'S ABILITY TO DELIVER TO FINAL INVESTMENT DECISION (FID) (EY, 2014)

Oil and gas companies need to evaluate and improve capital program effectiveness at each phase of a given project and determine whether the project is ready to progress into the next phase. Careful assessment is needed to ensure the project will effectively add value to the company. The risks associated with delivering major oil and gas projects in Alaska are substantially different and unique due to the Arctic remote location, environment, weather, permits, logistics, labor, equipment, codes and standards, etc. Therefore, it is important to have an appropriate assurance system in place to increase the likelihood that proposed projects will meet or exceed the delivery expectations set out in the business case. There is little room for negative financial and reputational outcomes in the current fiscal environment. Further, it is proposed that an assurance review process comprised of local Alaskan internal SME's will have certain advantages over a generic external review team.

Project Objective

The Self-Assurance Review Framework (SARF) proposed by the project provides a new project gate SARF applicable to major Alaskan oil and gas companies to improve project delivery. The assurance process will be a “cold-eyes” independent review performed with local internal SMEs prior to the approval gate to ensure the project team has considered all aspects of the project readiness. It will assure the project will be successfully and safely executed on budget, on schedule, and within scope. While external consultants are available to conduct such reviews, this process was designed as an internal assurance review process in order to create a continuous improvement cycle employing local internal SMEs who are accustomed and familiar with the execution of Arctic projects, and experienced with prior corporate project successes, failures, and issues.

This assurance review framework is defined primarily for major projects of a total installed cost of one hundred million dollars US (\$100 MM) or above and having a scope typical of North Slope repetitive nature projects as shown in the Exhibit 3 below. Projects that fit the criteria are new support facilities, pipelines, drill sites and infrastructure upgrades. This proposed SARF process could be judiciously employed when desired for smaller scale projects, depending on project complexity or criticality.

Exhibit 3 depicts a new drill site project that is under development currently by ConocoPhillips Alaska Inc. in the North Slope, Alpine field. This type of development project is well suited for a local assurance review process; considering that, more than one hundred drill sites already exist on the North Slope of Alaska.

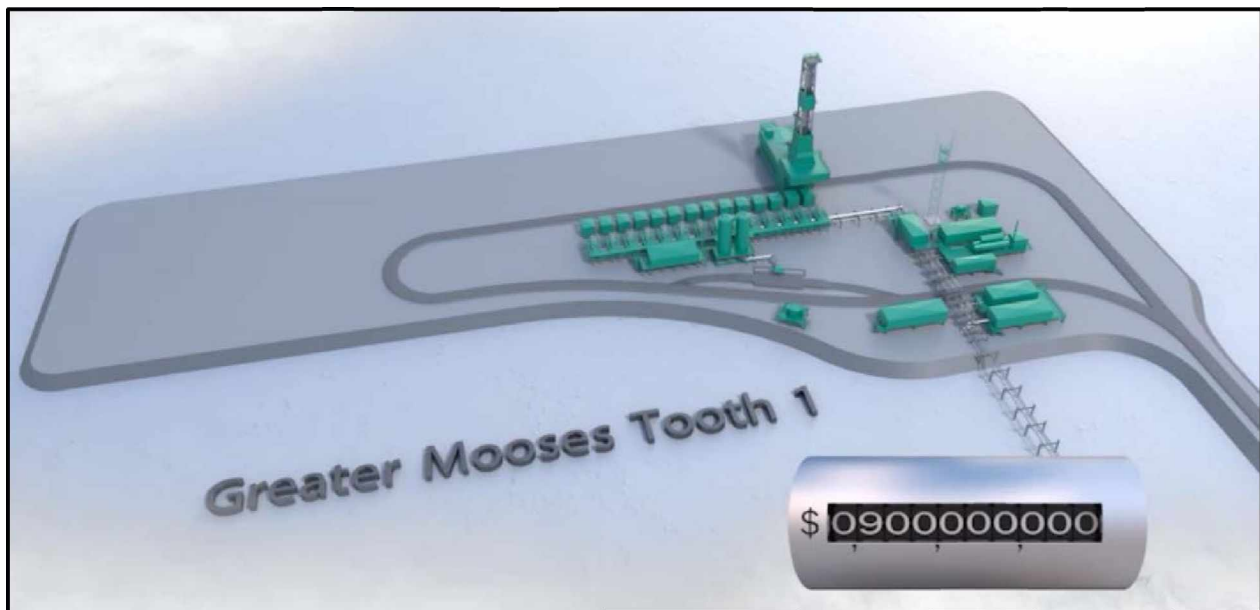


EXHIBIT 3: NEW NORTH SLOPE DRILLSITE DEVELOPMENT “GREATER MOOSES TOOTH 1”
(CONOCOPHILLIPS, 2015)

Project Background

As part of the Project Management Masters curriculum at University of Alaska Anchorage, two semester Capstone classes were required in order to complete graduate program requirements. This product-based project was the topic selected.

The deliverables of the project are:

- Project management plan which covered the execution plan of the project
- Final project report which describes the project, the research accomplished, and the finished project product
- SARF applicable to major Alaska oil and gas companies recommended to improve project delivery

The project management plan was prepared in the Capstone class I during spring 2015 semester, while the final report and self-assurance framework were created during fall 2015 semester in Capstone class II.

The following project assumptions, constraints, exclusions, and critical success factors were determined at the onset of the project:

Project Assumptions

- Project Manager has access to necessary software programs (for example: Microsoft Office, WBS Chart Pro, Blackboard, Google Docs)
- Advisors are available to review and give constructive feedback on draft project deliverables
- There is sufficient literature on the topic to allow for a thorough literature review
- Interviewees are responsive and collaborative throughout the entire duration of the project
- Project Stakeholders have adequate time to review and approve project deliverables

Project Constraints

	<u>Time</u>	<u>Effort</u>	<u>Scope</u>
Hard			
Adjustable			
Soft			

EXHIBIT 4: PROJECT CONSTRAINTS

- Project Progress Milestone (PPM) and project delivery dates are as specified in 686A and 686B syllabi
- Advisor and committee members time availability allows for effective interaction
- Scope is adjustable as long as proper change management is done

Project Exclusions

- The project neither discloses confidential information nor uses it in the final written report in such way that it could be attributed to an individual or corporation
- No more than ten persons will be interviewed and their individual answers or identities will not be disclosed
- Interview answers will neither be published nor shared with the stakeholders. They will be used without any personal references and will be used to inform and improve the proposed project assurance framework
- The project does not include presenting the project findings to stakeholders outside of the identified stakeholder group. Closing procedures associated with organizational stakeholders is out of scope
- The project report will not be published in a scholarly journal

Critical Success Factors

- The project delivers the required Project Progress Milestones (PPMs) on time, per program requirements
- The analysis is completed at the end of the project (December 2015) and a conclusion is reached
- The project stakeholders maintain their support of the project and collaboration with the project manager
- Stakeholders and committee members communicate effectively, adhering to agreed communication requirements
- The research paper follows research ethics code and standards and is based on factual data
- The project is managed in accordance with Project Management practices and academic department expectations
- Award of “go” decision is achieved at academic Go/No-Go decision gates

Research

The research methods employed for this product-based project were a literature review and interviews.

In order to gain understanding of what project gate assurance reviews are, what the benefits are of performing assurance reviews prior to project gate approvals, and what the current challenges are with different review cycles and methodologies, a literature review was conducted.

In order to gather the necessary experience-based knowledge to determine the criteria and content of the project gate self-assurance review framework, interviews with local Alaskan project professionals experienced in major projects delivery were completed during summer 2015 per the project management plan.

The data collected from the literature review and interviews were used to define the proposed project gate self-assurance review framework.

Literature Review

The literature review was started early during the first Capstone class in order to gather information on why project gate assurance reviews are needed and how current traditional review cycles and methodologies are performed. Numerous sources including project management articles and published books were found through the University of Alaska Consortium Library and via online searches. These were reviewed, analyzed, and collected to create the proposed project gate self-assurance review framework on an academic and professional literature basis. At project initiation, it was realized there was an abundance of broad-based publications dealing with the subject of project gate assurance reviews.

No information was available regarding project gate assurance review processes specific to the State of Alaska where the project's primary project deliverable was focused. Given that methodologies for project gate assurance reviews are generally similar throughout the country and different industries, data from the literature review was deemed appropriate for use in developing the assurance framework.

The literature review is organized and summarized to answer the following key questions:

1. What are project gate assurance reviews?
2. Why are assurance reviews important?
3. What are the challenges associated with assurance reviews?
4. How can the project reviews be streamlined in order to save cost and time in the current economic climate?
5. What key recommendations will improve an assurance review process?

Each of these questions is addressed in the following section.

1. What are project gate assurance reviews?

Project gate "assurance reviews are structured, independent reviews that challenge the Project Team to justify the conclusions of their work. Scrutiny from experts external to the Project Team help, identify weaknesses and shortcomings, leading to specific recommendations for improvements. Assurance reviewers introduce additional outside perspective in order to increase potential project value and allow the project to avoid the risk of missing opportunities for improving technical and business solutions" (Mattu & Marini, no date, p5). The assurance reviews are checks to validate if the project is balanced appropriately as shown in Exhibit 5 below.

According to Oakes (2014), "Unnecessary failure happens when people with the skills, resources, and authority to act effectively don't get full, validated information about project status and issues. The role of reviewers and assurance is to provide this information."

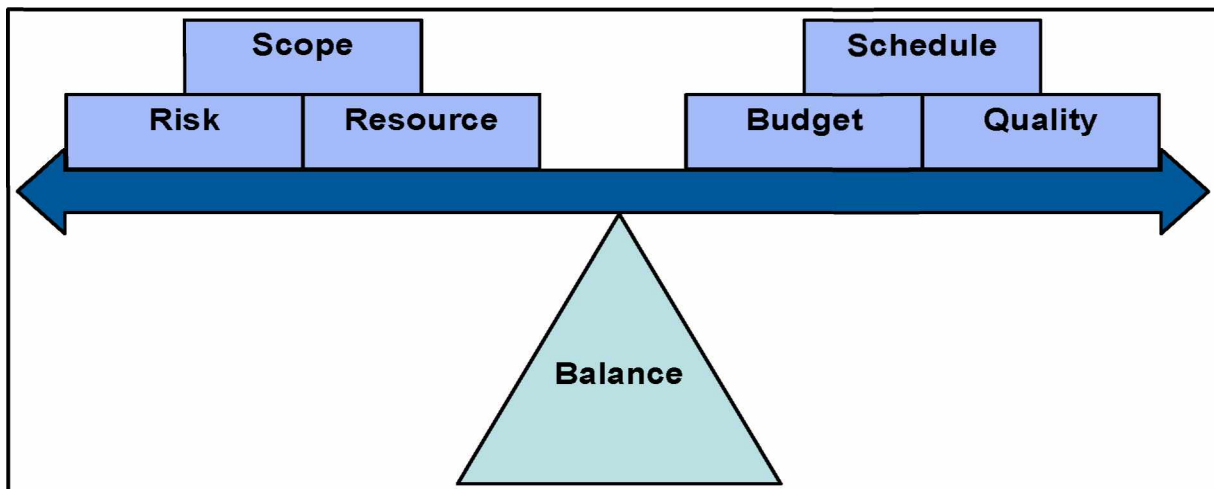


EXHIBIT 5: PROJECT GATE ASSURANCE ROLE

The literature indicates that a phase gate process is commonly utilized in mature oil and gas companies. Exhibit 6 and 7 describe the typical delivery process for an oil and gas project. Project delivery moves from inception to completion, managed in discrete phases separated by clear decision gates. Each phase has objectives and deliverables appropriate for that stage of project maturity. Concept development work is performed in Evaluation/

Appraise phase followed by a Concept Selection phase. Project delivery work is done in the remaining phases, namely Concept Definition where detailed engineering is progressed and Execution where procurement, fabrication and construction activities occur. Finally, the completed project is handed over to an operations team for joint commissioning, start-up, and performance testing in collaboration with the project execution team. In many cases in Alaska, the first two phases are performed by a projects appraisal team, and then the project is handed over to an engineering and execution delivery team.

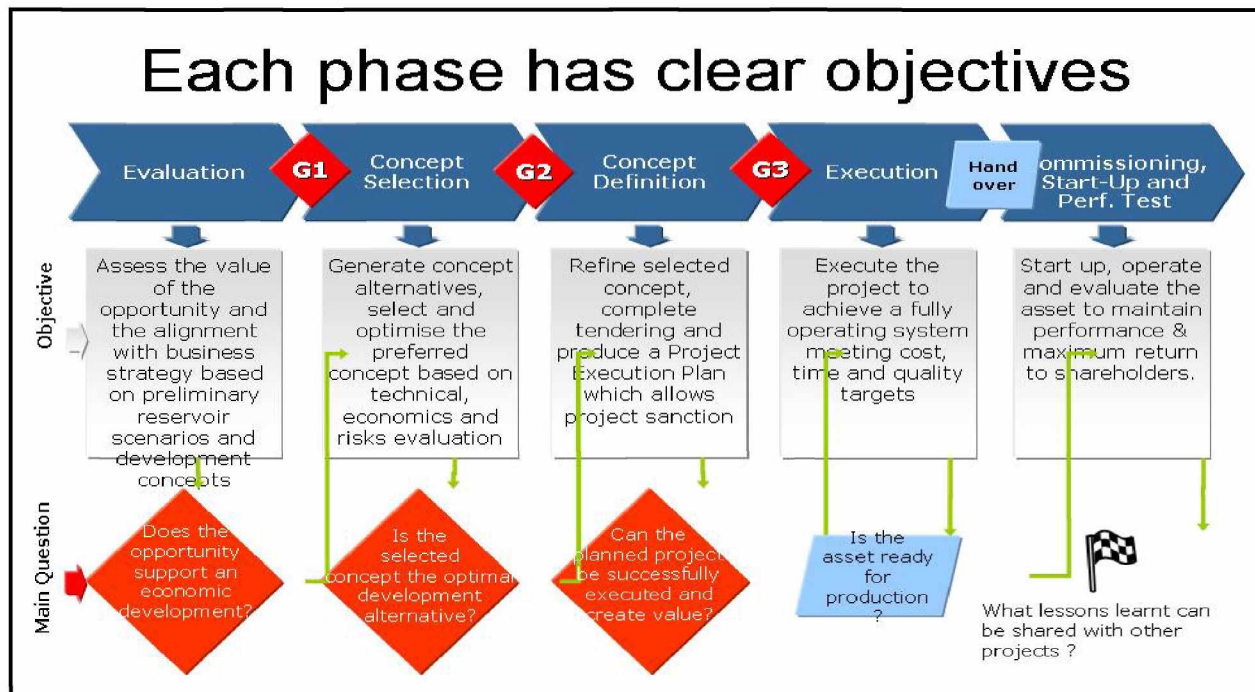


EXHIBIT 6: FULLY DESCRIPTION OF A PROJECT CYCLE (AIMS, 2015)

Exhibit 7 is an excellent summary of the whole project phase gate process and clearly spells out the key aspects of both ARs and gates. Gate assurance reviews validate if a project is ready for the next phase. Assurance reviews are typically near the end of a project phase, and inform a go/ no-go decision to be made by a decision board.

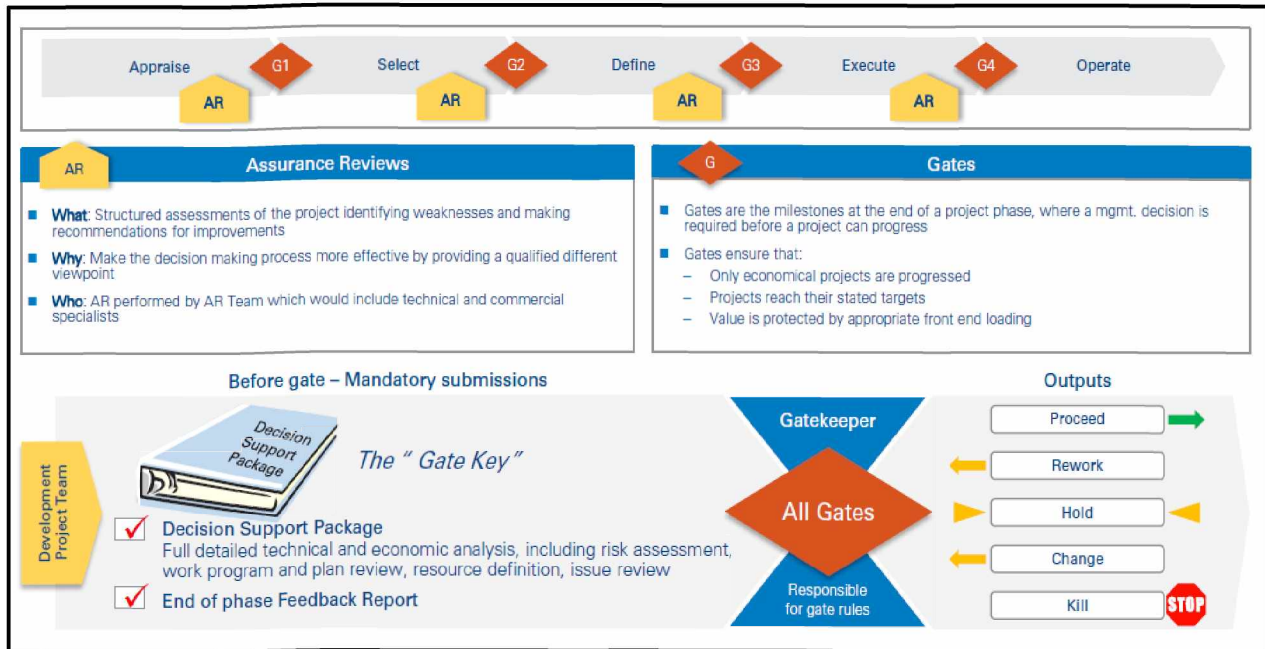


EXHIBIT 7: GOOD PRACTICE STAGE GATE PROCESS (SURESH, DUTTO, KRUSE, ROGERS, 2013)

Exhibit 8 describes the decision gate, where the assurance review is a key pre-assessment of project readiness. If a project does not meet criteria of acceptability, either economically or technically, the project should not pass the gate. The assessment performed by the decision board at each gate re-evaluates the project prior to committing additional resources. A decision board of management stakeholders including operations, projects, commercial, finance, and reservoir development typically does formal approval.

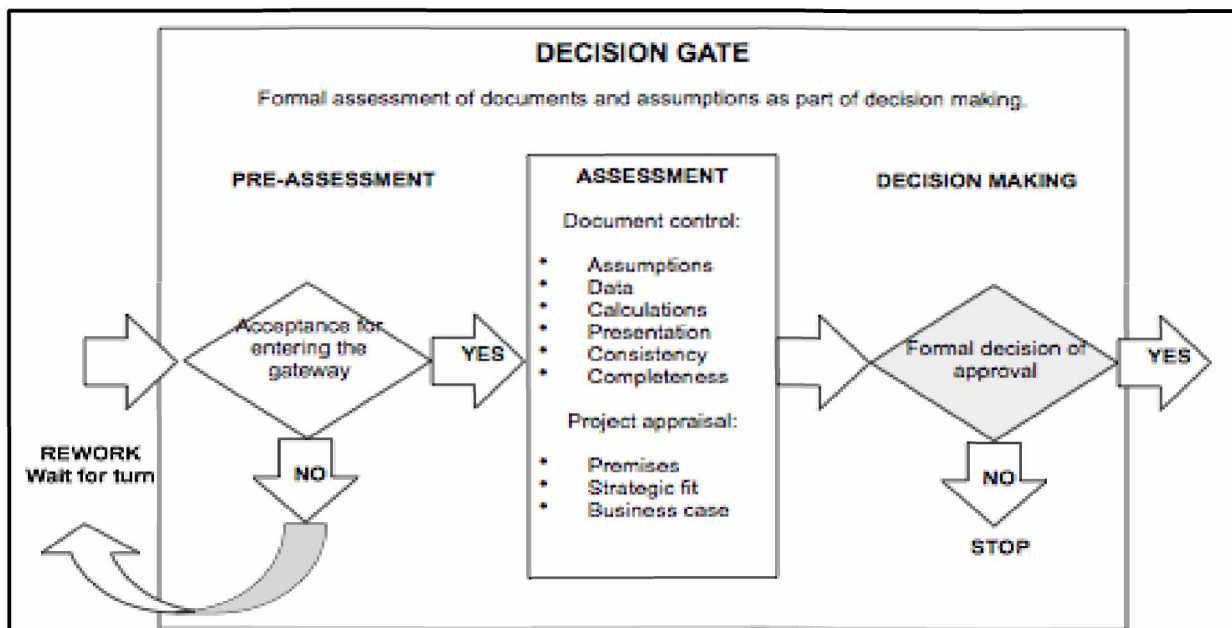


EXHIBIT 8: PROJECT DECISION GATE APPROVAL PROCESS (OJK, 2012)

2. Why are assurance reviews important?

Historically, projects would start and be executed without retrospective review. But over the last decade, the importance of assurance reviews has become recognized as good practice to ensure that the projects are on track, ready for the next stage, and can deliver per the plan issued (Oakes, 2008).

As is shown in Exhibit 9 below, early decisions are crucial and corrective actions must be taken early in the project in order to be able to deliver the promised scope within defined budget and schedule (EY, 2014). As the project progresses through subsequent phases, there is less ability to manage or influence costs. Conversely, if issues are not identified early, project change requests can rapidly drive up costs and affect schedule.

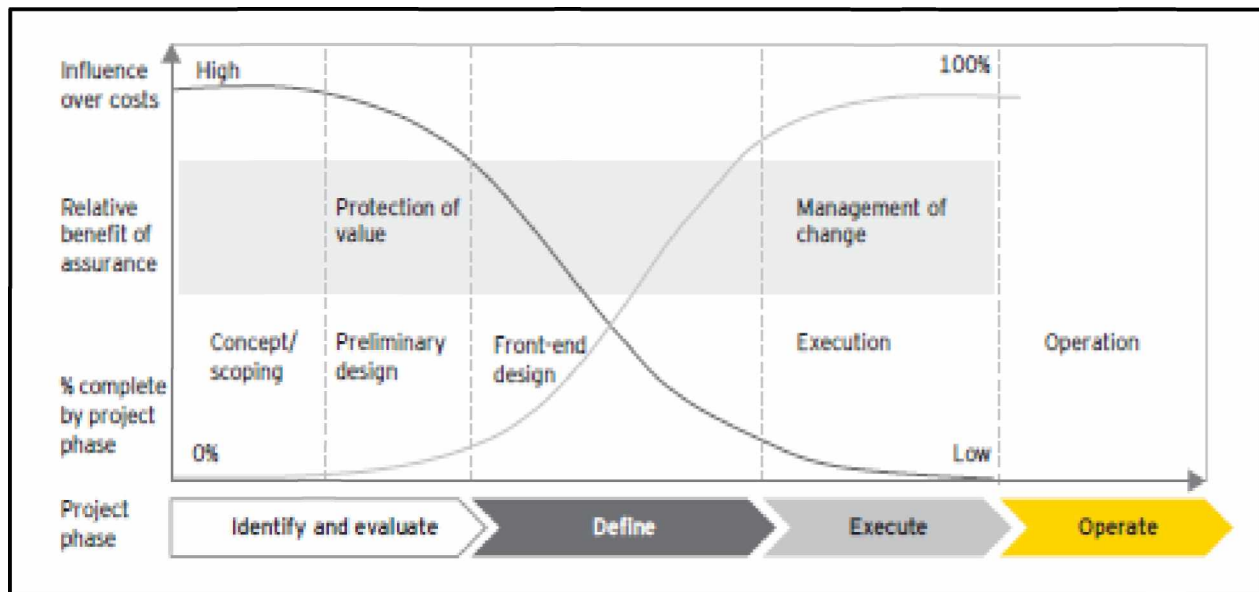


EXHIBIT 9: THE LINK BETWEEN INFLUENCE OVER COSTS AND THE PROJECT STAGES (EY, 2014)

Project teams are often assembled and disbanded ad hoc for each individual project. Resources such as engineering, management, procurement, and construction are often consolidated in varying combinations project-by-project. Given the variability in corporate knowledge and capability of these project-by-project collaborations, it is vital for the sponsoring corporation to assess project readiness across each phase of every project.

It is essential to have an appropriate assurance system in place in order to guarantee that the projects will meet or exceed the delivery expectations set out in the business case, which affects the financial and reputational health of the company. An effective assurance review validates the following key project aspects:

- Scope is clear and fully executable
- Schedule is attainable according to execution plan
- Cost is aligned with the scope of the project
- Risks have been identified and quantified
- Project is economically viable, or is justifiable on a non-economic basis

3. What are the challenges associated with assurance reviews?

According to Suresh, Dutto, Kruse, Rogers (2013), “Many companies lack consistent and uniform project governance philosophies for capital projects. We find that written policies, procedures and mechanisms, dictating how the projects will be governed and independently assured, are often not available. In many cases, Project Boards for review decisions made by project teams do not exist. Even where they do, their objectives are not clear. Nor are the roles, responsibilities and required capabilities of members. We often find that Project Boards simply perform a rubber-stamping role. Furthermore, proper value-assurance approaches are seldom implemented. Due to the lack of suitably qualified resources, it is also common for the same individuals to end up performing multiple roles both within project teams and outside. Conducting assurance functions in this manner represents a potential conflict of interest” (p. 6).

Several literature review sources state that one problem that assurance reviews face is the lack of a structured assurance review process. Also cited is a lack of guidelines for assurance review scope, preparation, and documentation requirements. Without appropriate guidelines in place, tension can arise between the PMT and the ART, which distracts from the necessary work at hand (Oakes, 2008).

The PMT can sometimes be so involved into the project that they can miss issues, or be so schedule driven as to ignore complications that threaten project execution or cost. The ART and DB need to recognize this behavior and share feedback constructively to the PMT (EY, 2014).

Often cited, a key challenge faced by an assurance review team is the ability and strength to state that a project is not ready for the next phase. Human nature wants to be encouraging and to provide positive feedback. Therefore, it can be difficult for the ART to state the necessity to stop or recycle a project. If an assurance review finds that a project is not ready, i.e. has not completed the requisite deliverables for that phase, it needs to be prepared to make a recycle or kill recommendation.

According to EY (2014), “heightened project activity in the global oil and gas sector has been exerting pressure on key resources such as labor, and as a result, companies are struggling to secure the capabilities, capacity and expertise required to effectively manage their most challenging projects” (p.10).

Another key challenge is the allocation of sufficient time by the ART members and/or their respective line managers to perform an effective AR (Oakes, 2008). Since the ART is comprised of local SMEs who have their own work and deliverables, the AR may be viewed as a non-important activity by the SME if it is not stated to be a priority by their manager.

4. How can the project reviews be streamlined in order to save cost and time in the current economic climate?

Experience as a Project Management Professional (PMP) certified by Project Management Institute (PMI) delivering projects for a local Alaskan oil and gas company for the last decade has revealed that there are both cost and quality efficiencies to be gained by leveraging local company expertise rather than external reviewers at the approval gate reviews for repetitive type projects. Local personnel can ensure the project team has considered all aspects of project readiness and assure the project will be successfully and safely executed on budget, on schedule, and within scope. Employing internal local SMEs can save time as the reviewers are accustomed and familiar with the execution of Arctic projects, and experienced with prior project successes, failures, and issues. Benefit of local ART membership is that staff is located in the same office which can facilitate effective communication. Less time will be required for the review than would be needed by an external review group.

Participating as reviewers, the local SMEs gain a broader perspective of corporate activities and develop a deeper understanding of overall project readiness requirements, which will improve project delivery. Rather than focus on particular details, an effective assurance review is a quick refresher course in overall project management. By hosting such reviews using in-house personnel, a corporation will deepen its organizational capability.

5. *What key recommendations will improve an assurance review process?*

As Oakes (2008) describes in detail in his book “Project Reviews, Assurance and Governance,” gate assurance reviews need to follow a structured process and be performed effectively by the project management team and assurance review team in order for the reviews to provide due diligence assessment of the project’s state and readiness.

The process should be fit for purpose for that particular gate and project, written down, and have clear scope, boundaries, staffing, and timeline, which are agreed to prior to the AR. The PMT should recognize the ART is working collaboratively to ensure maximum project value is realized, and share information openly and transparently, by indicating both weakness and strengths of the project.

The ART needs to be experienced with the type of project being assured, and needs to dedicate sufficient time before the AR to become familiar with the project. The ART needs to recognize there is more than one way to design a project, and be willing to accept the PMT’s ability to make choices appropriate for the project particulars so long as they are safe, within budget and schedule, and meet scope requirements.

Interviews

As per the approved project management plan, all ten interviews were conducted over the summer 2015 with a mixture of project managers, planners and advisors. The interviewees were selected based on their experience with project gate assurance reviews for major oil and gas companies in Alaska and elsewhere. As written in the interview protocol, the data was compiled in such way that the interviewees are not identified and their names and companies are kept confidential.

The interviews were scheduled one or two weeks in advance to provide the interviewees ample time to study the interview protocol. All interviews were recorded in face-to-face meetings in order to ensure all notes were taken accurately while an attentive conversation was conducted. All interviewees signed the consent form containing the approved research terms and conditions set forth by the requirements from the University of Alaska, Institutional Review Board (IRB). Appendices B and C contain the Consent Form and Project Interview Protocol, respectively.

Interviews were distributed in two parts with open-ended questions. The first part consisted of questions regarding the interviewee’s individual history in project gate assurance reviews, while the second part consisted of project gate assurance review-related questions. The interview protocol was created with open-ended questions to gather experience-based knowledge and best practices to support development of a new project gate self-assurance framework applicable to major Alaskan oil and gas company projects. The interview questions were as follows:

Individual history

- What worked especially well during project gate assurance reviews that you have been involved? Have you been through any particularly effective assurance reviews? What made the review effective?
- On what topics did you spend most of the review time? Why?
- What were the project benefits or key findings from the assurance review?
- What did not work well during the reviews? Why? What are the most significant pain points with respect to the way the assurance reviews are currently done? Was it necessary pain or is there an easier way to assure the project?

Assurance review suggestions

- What are your key suggestions for the assurance procedure?
- Who needs to participate in a project assurance review?
- What are necessary elements of a good assurance review? How should you structure the review? What is the right structure for an efficient assurance?
- For an efficient assurance, what kind of pre-work is necessary to be completed by the project team? How much pre-work is expected from the review team?

- What kind of follow-up work is necessary after the assurance review is completed?
- With whom should the assurance review results be shared? For example: Assurance review team, project team, funding approvers, etc.
- What are some outcomes of the review that you foresee?
- How should the entire process be documented? What collaborative tools and techniques work best to achieve a successful assurance?
- Did you proactively capture lessons learned during and after the assurance review process? If so, how was that done?

Interview responses from the questions are summarized and analyzed below to determine the common patterns indicating desirable characteristics of the project gate self-assurance review. These characteristics ensure the reviews are meaningful and the projects benefit by having risks discovered early to enable cost effective mitigation of those issues. The following summarizes the most prevalent answers to the interview questions:

Questions/ Most prevalent answers are summarized or quoted below

Individual history

1. What worked especially well during project gate assurance reviews that you have been involved? Have you been through any particularly effective assurance reviews? What made the review effective?
 - Early engagement with all stakeholders in the process
 - The expectations of the review was discussed with PMT and ART ahead of the review meeting
 - PMT was open and transparent with ART. This allowed the assurance review team to see the full story and have the ability to determine if the project's current strategy/progress warrants approval to move forward
 - PMT provided all project documents for review 2 weeks upfront of the review. This allowed sufficient time to review all the materials. Questions were submitted to PMT based on the pre-read and the team responded either prior or during the AR
 - ART fully understood the project scope and deliverables and the ART's scope
 - ART was well versed to the current/ potential challenges of the project
2. On what topics did you spend most of the review time? Why?
 - Project execution plan
 - Process safety
 - Assumptions, critical success factors
 - Project schedule
 - Project risk register and contingency
 - Logistics
 - Many projects fail because the key assumptions were incorrect or improperly framed, and the wrong problem was solved
3. What were the project benefits or key findings from the assurance review?
 - Cold eye's input/ feedback on new scope that PMT did not recognize themselves due to lack of familiarity with the topic
 - The benefit of an independent assurance process is SMEs have time and authority to poke around and make an independent assessment

- The benefit to the project was having the ability to address findings or issues prior to their occurrence where the impact would be substantially larger
4. What did not work well during the reviews? Why? What are the most significant pain points with respect to the way the assurance reviews are currently done? Was it necessary pain or is there an easier way to assure the project?
- Going free form into a review rarely succeeds. It requires ample early preparation by PMT and thorough consistent review from ART. There is too much information that takes a long time to pull together for it to be efficient to do it "on the fly"
 - Inconsistency in expectations from different ART's and individuals within the ART's
 - ART should not require new documentation solely for the AR
 - Requests to change standard document format that has been acceptable in other projects
 - Documentation was not sent in a timely manner to the ART
 - Changes in ART from gate to gate
 - The ART are SMEs and they should not identify issues only but provide solutions as well

Assurance review suggestions

5. What are your key suggestions for the assurance procedure?
- Clear PMT/ ART expectations, requirements, deliverables and timeline need to be addressed and discussed and agreed early on with both teams
 - Publish a "typical timeline" for the review process: when documents need to be provided, what are the key inputs and outputs as it makes for a lower stress review when all know what the expectations are
 - Simplify the process. All documents should be turned in a minimum of 2 weeks prior to the assurance review and the ART needs to review those documents immediately. Once reviewed, they should work with their associated discipline counterparts to work through the questions or clarifications, preferably prior to the review
 - The PMT needs to know the questions to test at the beginning of the phase. The project management system should be very straightforward
 - The reviewers need to have experience with similar type projects. A reviewer who has worked offshore for 30 years cannot review a project in West Texas. He will not be familiar with the issues/challenges, will not be able to provide valuable feedback, and the project will spend inordinate time bringing him up to speed
 - It will not be an efficient exercise
 - The level of review needs to be fit for purpose. The same level of review for a pipeline is not required for a gas plant. This decision should be informed by discussions between PMT, ART and management at the local level
 - The assurance review meeting needs a clear agenda/ format
6. Who needs to participate in a project assurance review?
- The participants should be based on the characteristics of the project, but should typically include the following:
 - PMT:
 - Project Manager
 - Cost Estimator
 - Project Controls
 - Scheduling

- Risk Management
 - Construction and Commissioning
 - Information Management
 - Supply Chain
 - Engineering Management (Possibly Contractor)
 - Operations
 - Permitting
 - HSE and Quality Management excluded as each Mature Business Unit typically follows same process
 - ART consists of same discipline counterparts as the PMT
 - Funding approvers/ decision board representative (s) as they need to hear feedback directly from the ART. Decision Board is engaged at the onset and closeout of the AR
7. What are necessary elements of a good assurance review? How should you structure the review? What is the right structure for an efficient assurance?
- The PMT should be aware if assurance reviews are required at the beginning of the project
 - An overall timeline for the AR needs to be published
 - Roughly, a month prior the review the ART should meet with the PMT to describe how the assurance review will take place and request data/documentation. In addition, this gives the PMT an opportunity to provide a summary of the project to the assurance review team. Also, a clear and open discussion regarding what needs to be accomplished and what truly constitutes a finding
 - The assurance review team should work with their counterpart on the PMT to familiarize themselves with the project. The assurance reviewers should understand the project through and through prior to the actual review. This will allow for a more productive conversation
 - Each discipline should conduct independent reviews to ensure safety, predictability (cost and schedule), and completeness
 - Once all independent reviews are complete the ART and the PMT should meet to review the findings
 - The PMT should be given time to determine how they will address the finding (~1-2weeks) and then report to the review team. The project should proceed forward unless it's a substantive finding requiring corrective action
 - The items that are still considered substantive should be included in the funding documentation to allow management to understand the risk. In addition these findings should be carried forward in the next phase assurance plan
 - AR findings need to be categorized into necessary corrective actions vs. nice-to-haves or recommendations
8. For efficient assurance, what kind of pre-work is necessary to be completed by the project team? How much pre-work is expected from the review team?
- Pre-work is really critical for an effective review
 - Documentation type and style can vary, but needs to be sufficient for ART to arrive fully briefed on the project in its entirety
 - Simplify the process and documentation necessary
 - PMT should not have to invest much time and effort into the prep work as the documents should be already part of a typical decision support package that is created for each gate. They are only providing data/documentation and answering questions to familiarize the assurance review team
 - ART should be putting in the hours early to ensure they understand the project's current maturity and execution strategy

9. What kind of follow-up work is necessary after the assurance review is completed?
 - In theory, if the PMT and ART work the process simultaneously, there should not be follow up work required if no corrective actions are required
 - The findings need to be captured into a register that is kept up to date. Also, depending on the finding type, there needs to be an agree-to date and actions set in place
10. With whom should the assurance review results be shared? For example: Assurance review team, project team, funding approvers.
 - The results should be included in the funding documentation and shared with management. In addition, the results should be kept open to the company for other projects to review
11. What are some outcomes of the review that you foresee?
 - In theory, there should not be any outcomes other than project gate approval
 - Go/ No-go or additional work required as corrective actions
 - The most common outcome is to add the findings to a risk register and adjust the project's cost/schedule/execution as necessary
12. How should the entire process be documented? What collaborative tools and techniques work best to achieve a successful assurance?
 - The materials need to be stored for future access on a shared drive by the PMT. It would include the framing sessions ahead of the review, prepared pre-reads, presentations during the review, and the reviewer's findings document. A final email between the reviewer team leader back to management would document the high level findings and agreed-to plan for actions, if any, with a timeline of expected completion
 - SharePoint site that collects all of the assurance plans, findings, etc.
13. Did you proactively capture lessons learned during and after the assurance review process? If so, how was that done?
 - The reviewers should look to see what lessons learned the project is applying from previous projects. Also the ART should update their assurance process to apply the lessons learned from these reviews
 - Typically, no lessons learned were captured at the assurance reviews

Analysis

Analysis of interviewee responses is arranged into pre-AR preparations, the AR itself, and after the AR.

Pre-Assurance Review

The majority of the interviewees stated that clear expectations need to be established prior to commencing the review cycle for an effective assurance review. This is best accomplished by an early meeting between PMT, ART, and DB representatives. The ART needs to provide a clear outline of the assurance review process, timeline, and deliverables. In this meeting, the ART needs to determine funding approver expectations and to inform the group how the findings of the AR will be categorized and shared. In the framing session, the PMT should provide an outline of all documentation that will be shared prior to the AR so that the review team will know what documents they will receive for review. The PMT should propose an agenda and logistics for the review meeting.

The interviewees all indicated that the PMT should provide project documentation to the ART at least two weeks prior to the AR. The ART must review the documents, ask clarifying questions to their PMT counterparts, and request any additional information that may be required. The interviewees stressed the importance of the ART to be truly prepared, and spend adequate time reviewing the documents prior to the AR. The ART needs to become familiar with the project scope and strategy. Interviewees said that the ART should not request special formats or ask for new documentation beyond what the PMT generated for project purposes appropriate to that respective gate. A leader of the ART needs to be named to facilitate the AR process.

Assurance Review

Interviewees agree that an effective AR is not a series of presentations, but it is a two-way dialog. Outside of an initial overview of the project by the PMT, the review is a series of discussions on a topic-by-topic basis according to an agenda. During the review, the PMT needs to be open and transparent with the ART. This will allow the ART to see the full story and have the ability to determine if the project's current strategy and progress warrants approval to move forward. Additionally, the ART are SME and should not only identify issues but also recommend potential solutions, for example, this is how an issue of same nature was solved in the past.

Feedback from the ART is typically prepared after the entire review with the PMT is completed. The ART can typically take half or a full day to prepare a summary of project findings. The ART presents their findings in a joint session with the PMT and DB representative(s). Findings need to be categorized into degree of significance to project approval, for example, high, medium, and low. A "high" finding is a showstopper used by the ART to indicate an issue that should be corrected prior to commencing through the gate, or else kill the project. Note the DB factors AR findings into their go / no-go decision at the project gate, and may opt to ignore the ART findings on occasion. Findings should be documented with initial action plans prepared by the PMT. Feedback regarding AR session should be provided by PMT in order to improve the AR process.

Post-Assurance Review

Interviewees indicated that following the AR, the PMT should work to resolve the findings. The PMT should schedule a follow-up with the DB within two weeks of the AR to indicate the findings resolution plan and readiness to progress through the next gate.

Project Gate Self-Assurance Review Framework

The following lists best practices for a SARF, highlights favorable assurance review team characteristics, and documents the proposed SARF itself.

The following best practices are recommended in order to perform effective project gate assurance reviews based upon the literature review research and interviews with experienced project management professionals:

- The assurance process needs to be a simple and well-structured process
- Clear expectations need to be negotiated regarding the assurance review upfront
- A "typical timeline" for the review process needs to be published
- PMT needs to be open-minded, transparent, receptive to feedback, and well versed in the scope of the project
- Decision support package needs to be detailed and well-organized representing the current phase of the project
- ART needs to be competent and experienced in Arctic oil and gas projects and dedicate enough time to review the project documentation prior to the assurance review
- The AR meeting needs to be free flowing discussion of questions and answers, while still following a set agenda, rather than a series of canned presentations by the PMT
- The AR needs to follow an agenda to ensure all discipline topics are covered. The agenda should contain expected start and stop times for each topic so that appropriate PMT personnel are available

- The findings need to be documented, categorized, reviewed and followed-up by PMT
- ART should bill their time to the specific project that is being reviewed in order for the AR costs to be tracked for benchmarking purpose
- Management needs to allocate enough time for the ART SMEs in order for them to perform the review. In addition, recognition is important to be provided to the ART in their annual performance review cycle

The ART should have the following characteristics:

- Local Alaska subject matter experts
- Experienced in the type of project that is being reviewed
- Constructive communicators
- In addition to identifying problems, also be capable to propose solutions and recommendations

Exhibit 10 diagrams the reporting relationships and structure of an independent assurance review process. As shown, it is critical the PMT and ART are completely different personnel and not performing multiple roles both within project team and within review team. Note that one danger created by an internal, local assurance process is that a company may lack a sufficiently large staff of qualified SMEs outside of the PMT. In this case, external reviewer (s) should be considered for addition to the ART.

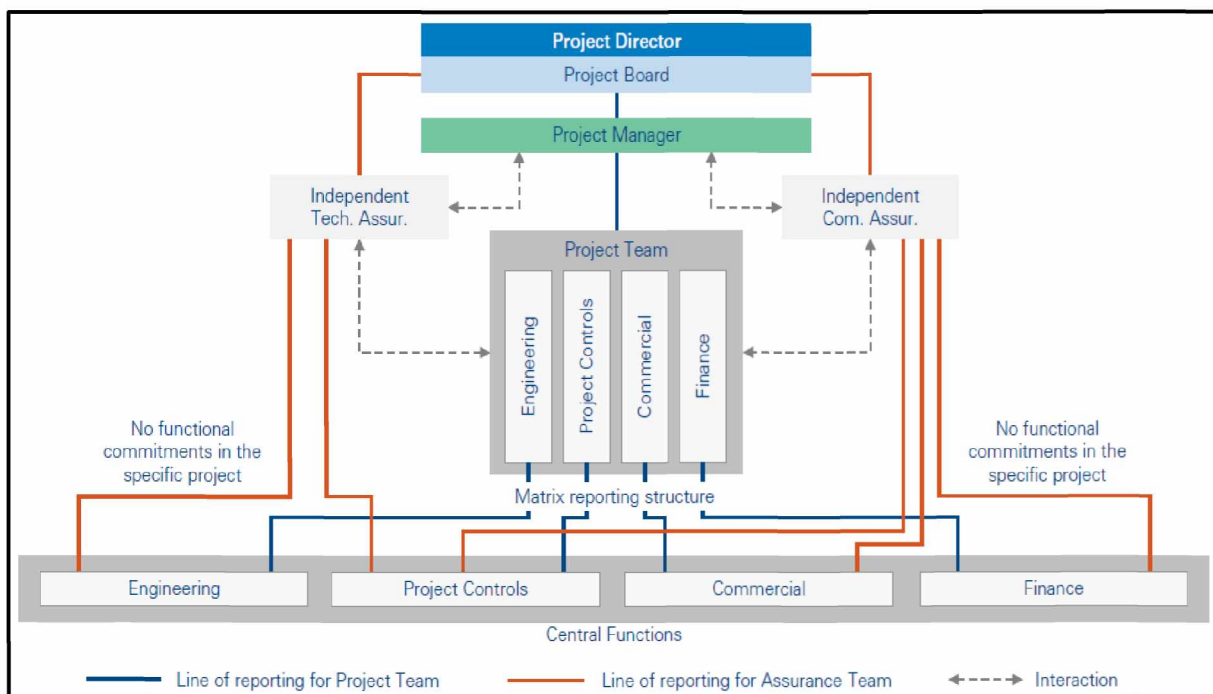


EXHIBIT 10: GOOD PRACTICE PROJECT GOVERNANCE AND ASSURANCE (SURESH, DUTTO, KRUSE, ROGERS, 2013)

Exhibit 11 is the proposed project gate self-assurance review framework high-level workflow. The key inputs to the SARF are a kickoff meeting to discuss AR process, timeline, and expectations, and a decision support package shared by the PMT detailing project status for the current phase. Following the assurance review, the key outputs will include a documented findings report including high-level ART observations, recommendations, and suggested corrective actions. These are used as inputs to the phase gate go/ no-go decision by the DB.



EXHIBIT 11: PROPOSED PROJECT GATE SELF-ASSURANCE REVIEW FRAMEWORK HIGH LEVEL WORK FLOW

Exhibit 12 (Appendix 1) is the proposed project gate self-assurance review framework and timeline, which lists the key expectations and deliverables for each participating group. When used in conjunction with the best practices by a qualified ART of local internal SMEs, this framework can effectively improve project outcomes by catching issues early in project life when damage control costs and issues are minimized.

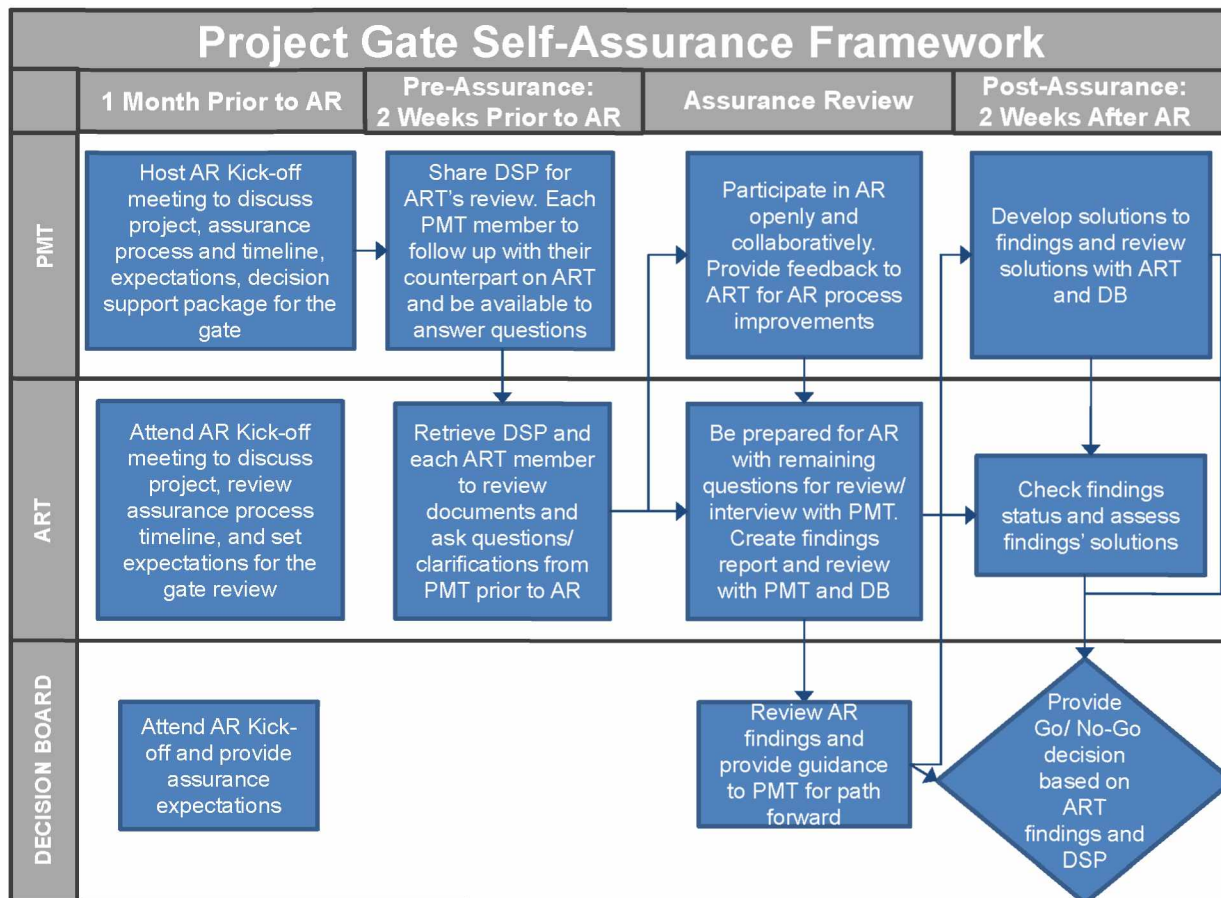


EXHIBIT 12: PROPOSED PROJECT GATE SELF-ASSURANCE FRAMEWORK AND TIMELINE

Conclusion

The SARF proposed in Exhibit 12 completes the project deliverables requirements for Capstone Class II. The framework was prepared based on the research conducted from literature review and interviews with experienced project management personnel in accordance with the execution plan put forth in Capstone Class I. The project management professionals interviewed, the project sponsor, and the project advisory committee have reviewed and conceptually approved the conclusions drawn in this project and their recommendations and comments have been incorporated. The proposed framework will improve project delivery by leveraging the use of local internal Alaskan oil and gas company SMEs and will deepen corporate organizational capability in a cost effective manner when formal training budgets are reduced.

Recommendations

In the current oil price environment, companies need to embrace considerable transformational change in order to remain profitable. Project assurance reviews need to be fit for purpose and can be accomplished internally within

each major Alaskan oil and gas company using their SMEs assigned locally rather than an external travel team of reviewers.

The use of local internal expertise, in addition to lowering assurance review costs, will increase internal collaboration and create a beneficial project improvement cycle. These SMEs should be well accustomed to the current and potential Arctic challenges that the local project team faces and should be familiar with prior project successes and failures. There are both cost and quality efficiencies to be gained with this approach by leveraging local expertise.

This assurance review framework is defined primarily for major Alaskan oil and gas projects of a total installed cost of one hundred million dollars US (\$100 MM) or above and having a scope typical of North Slope repetitive projects, meaning new facilities, pipelines, drill sites and infrastructure upgrades. This process could be judiciously employed when desired for smaller scale projects, depending on project complexity or criticality. The project gate self-assurance review framework proposed in this project can be employed by Alaskan oil and gas companies to provide cost effective project assurance for their repetitive type projects. For one of a kind projects not typically executed on the North Slope (e.g. bridges, power generation, etc.), assurance reviews should still be conducted through a third party specialized in that particular type of project assurance review.

To fully realize the benefits of recommendations offered in project, additional work on a new detailed assurance procedure is recommended based on the project gate SARF proposed. The procedure should have the following items well clarified and addressed:

- Selection process for ART
- Decision on ART funding
- Documentation required for assurance review based on company project management processes
- Clear expectations regarding the review
- Categorization of findings (low, medium, high) and consequences
- Standardized template or score card for evaluating all disciplines, which defines key deliverables needed by particular phase gate

Lessons Learned

The following section describes the top lessons learned while completing the project.

Descriptive Lesson Learned Title: Project Manager to acquire company legal counsel approval early in the project if required

Lesson Learned Summary (Problem, Solution, and Result): The Capstone project required legal counsel support and approval from company. The project manager assumed legal counsel approval would be acquired as quickly as the project sponsor approved the project scope. Due to the length of the legal counsel approval cycle, the project manager changed the project scope using proper change management and documented the change through a change order approved by sponsor and advisor. The project is not related to any particular company, does not contain any proprietary information from the company, and eliminated corporate legal review.

Recommendations: In order to avoid scope change, the project manager should acquire company legal counsel approval early in the project and ensure that all legal counsel approval activities are clearly shown in the schedule.

Descriptive Lesson Learned Title: Project Manager to start communication early with stakeholders for buy-in and involvement

Lesson Learned Summary (Problem, Solution, and Result): The project manager needs to ensure sufficient interview responses are received in Execute phase, and it is crucial to communicate with prospective stakeholders regarding the project in order to receive their buy-in to collaborate as interviewees early in the project.

Recommendations: Conducting interviews are only permitted after obtaining IRB approval, but discussions with prospective interviewees regarding the project and possible support should start early in order to ensure enough data is captured during Execute phase. Communication with stakeholders needs to start as soon as they have been identified through the Stakeholder Analysis.

Descriptive Lesson Learned Title: Project Manager to start IRB process early in the project

Lesson Learned Summary (Problem, Solution, and Result): The capstone project can be delayed due to IRB approval, and it is important to understand the IRB approval process well early on. The project manager passed the IRB test earlier than required per syllabi in order to ensure enough time for the IRB deliverables and review cycle. University of Alaska IRB determined that the project does not require approval, as it does not meet the definition of human subject research under the IRB regulations.

Recommendations: The project manager should start the IRB approval process early in the project and ensure all activities have been added to schedule: IRB test, IRB documents (IRB proposal, consent form, survey, interview guideline, etc.) approved by primary advisor, IRB documents submitted for IRB approval, etc.

Glossary of Terms

AR – Assurance review

ART – Assurance review team, a team engaged for their expertise and experience to contribute to the assessment of a project's progress against its stated objectives

DB – Decision board

DSP – Decision support package, fully detailed technical and economic analysis, including risk assessment, work program and plan review, resource definition, issue review

Gate(s) - A particular point(s) in a project's lifecycle when a Gate Review is undertaken.

Kickoff Meeting – A meeting between the PMT, ART, and DB to clarify the characteristics of the project, review the assurance process and timeline, expectations, decision support package for the respective gate

IRB – Institutional Review Board, an entity of the University of Alaska Anchorage

Project – Unique, transient endeavor undertaken to achieve a desired outcome

Project Manager - The official within or engaged by the Sponsor, with overall responsibility for the delivery of a project

PMT – Project management team, the team of individuals engaged by the Sponsor to assist the Project Manager in the delivery of a project

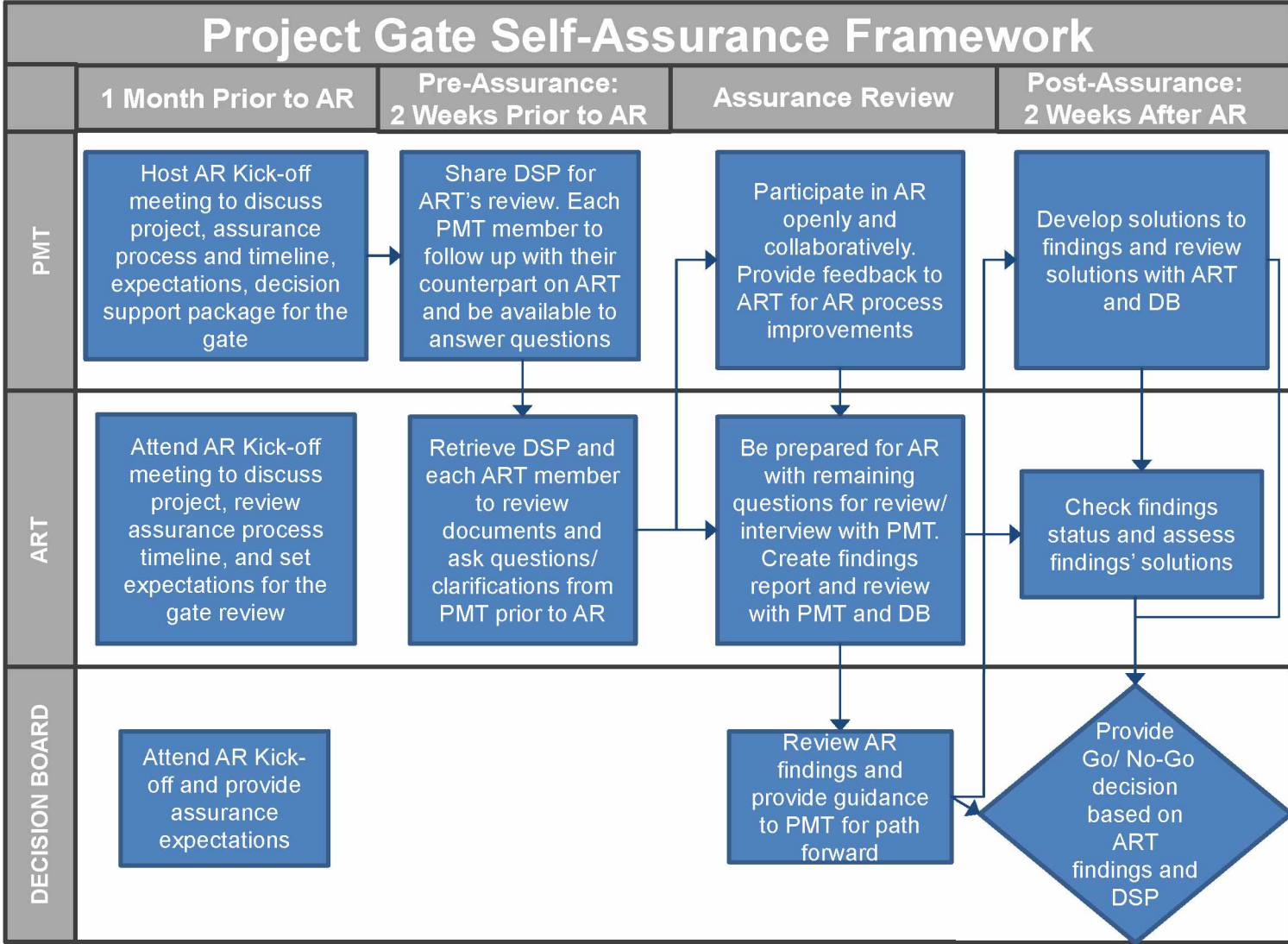
SARF – Phase gate self-assurance review framework

SME – Subject matter expert

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Appendix 1. Self-Assurance Framework



Appendix 2. Consent Form

CONSENT FORM

PRINCIPAL INVESTIGATOR:

Anca Bertus, PMP, MSPM Student
University of Alaska Anchorage
(907) 230-4837

FACULTY ADVISOR:

Roger Hull, PMP
University of Alaska Anchorage
(907) 786-1923

DESCRIPTION:

I am interested in developing a new project gate self-assurance review framework applicable to major Alaska Oil and Gas owner companies' projects to improve delivery confidence. The assurance process assures that the project will safely deliver the premised scope within the budget and schedule estimated. This assurance framework will be a "cold-eyes" review with in-house Subject Matter Experts (SMEs) at the Define and Execute approval gate to ensure the project team has considered all aspects of project readiness.

You have been identified as an Alaskan project professional experienced with major projects delivery. This research study will involve a structured interview with you lasting approximately 30 minutes.

VOLUNTARY NATURE OF PARTICIPATION:

Your participation in this study is voluntary. If you do not wish to participate, or would like to end your participation in this study, there will be no penalty or loss of benefits to you to which you are otherwise entitled. In other words, you are free to make your own choice about being in this study or not, and may quit at any time without penalty.

CONFIDENTIALITY:

Your name will not be attached to your interview responses. Your name and any other identifiers will be kept in a locked password protected file that is only accessible to me. Any information from this study that is published will not identify you by name. I will store the data for three years after project completion. After this date, all data will be destroyed.

BENEFITS:

Although there will be no direct benefit to you from participating in this study, others may benefit because I am aiming to streamline an effective project gate assurance review process.

RISKS:

There are no known risks to you. There may be some minimal risk of discomfort from your participation in this research because I will be asking you about past project experiences, both the positive ones and the negative ones. These risks are being minimized by keeping all information confidential and specific names extracted. If you feel uncomfortable at any time, you may choose to skip a question or stop the interview.

CONTACT PEOPLE:

If you have any questions about this research, please contact Anca Bertus or Advisor Roger Hull at the phone numbers listed above.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions or discuss any concerns about this study with someone other the researcher(s), please contact the:

University of Alaska Anchorage
UAA Research Integrity & Compliance
Sharilyn Mumaw
Phone: (907) 786-1099
Email: simumaw@uaa.alaska.edu.

SIGNATURE:

Your signature on this consent form indicates that you fully understand the above study, what is being asked of you in this study, and that you are signing this voluntarily. If you have any questions about this study, please feel free to ask them now or at any time throughout the study.

Signature_____ Date_____

Printed Name _____

Appendix 3. Project Interview Protocol

Date of Interview:

Participant:

Other Discussion:

References Discussed:

Additional Comments:

Introduction

You have been selected as a Subject Matter Expert to provide input for the Capstone Project I am currently documenting to satisfy requirements for courses at University of Alaska Anchorage. Thank you for your willingness to share your expertise related to this research effort.

I will be recording the interview to ensure that my notes are accurate and that I can capture all the details while carrying on an attentive conversation with you.

I plan to honor your time by managing this interview within the time allocated. In order to do so, I may at certain points have to cut our conversation short to move on to the remaining questions.

Your participation in this study is voluntary. You may stop at any time and you are not obligated to answer any questions. I am the only one who will have access to links between your name and the responses you provide.

If you wish to remain unidentified for the purposes of this research, my final research analysis will contain only generic references to the sources of the information you provide. Data will be compiled in such a way that you cannot be identified. Your name will be kept confidential.

The project is focused on the following Problem Statement, which I also supplied to you in advance.

Major capital projects can fail or have poor outcomes including significant cost and schedule overruns if the projects have not been through a comprehensive project approval gate assurance review. Subject Matter Experts (SMEs) must be leveraged in a manner wherein all design, construction, commissioning, and operational issues (including external factors such as extreme weather conditions) have been formally and properly addressed. Given the current economic climate, a more time and cost efficient self-assurance review framework could accomplish all gate assurance goals while keeping costs down.

Research is being conducted to gather knowledge and best practices and to support the development of a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery.

Individual history

14. What worked especially well during project gate assurance reviews that you have been involved? Have you been through any particularly effective assurance reviews? What made the review effective?
15. On what topics did you spend most of the review time? Why?
16. What were the project benefits or key findings from the assurance review?
17. What did not work well during the reviews? Why? What are the most significant pain points with respect to the way the assurance reviews are currently done? Was it necessary pain or is there an easier way to assure the project?

Assurance review suggestions

18. What are your key suggestions for the assurance procedure?
19. Who needs to participate in a project assurance review?

20. What are necessary elements of a good assurance review? How should you structure the review? What is the right structure for an efficient assurance?
21. For an efficient assurance, what kind of pre-work is necessary to be completed by the project team? How much pre-work is expected from the review team?
22. What kind of follow-up work is necessary after the assurance review is completed?
23. With whom should the assurance review results be shared? For example: Assurance review team, project team, funding approvers.
24. What are some outcomes of the review that you foresee?

25. How should the entire process be documented? What collaborative tools and techniques work best to achieve a successful assurance?

26. Did you proactively capture lessons learned during and after the assurance review process? If so, how was that done?

Project Gate Self-Assurance Review Framework for Major Alaskan Oil and Gas Projects

Anca Bertus

UAA MSPM Capstone Project

Fall 2015

Agenda

- Safety and Quality Moment
- Project Background
- Project Objective and Scope
- Deliverables
- Milestones
- Methodology
- Analysis
- Proposed Self-Assurance Review Framework
- Recommendations
- Critical Success Factors
- Lessons Learned



Anca Bertus
PMP, Project Leader for
ConocoPhillips Inc.

Safety and Quality Moment

A new tanker arrived in Qatar. Newly appointed western expat manager tells his local supervisor to ensure the tanker is clearly labeled:

“Diesel Fuel” in Arabic and “No Smoking” in Arabic

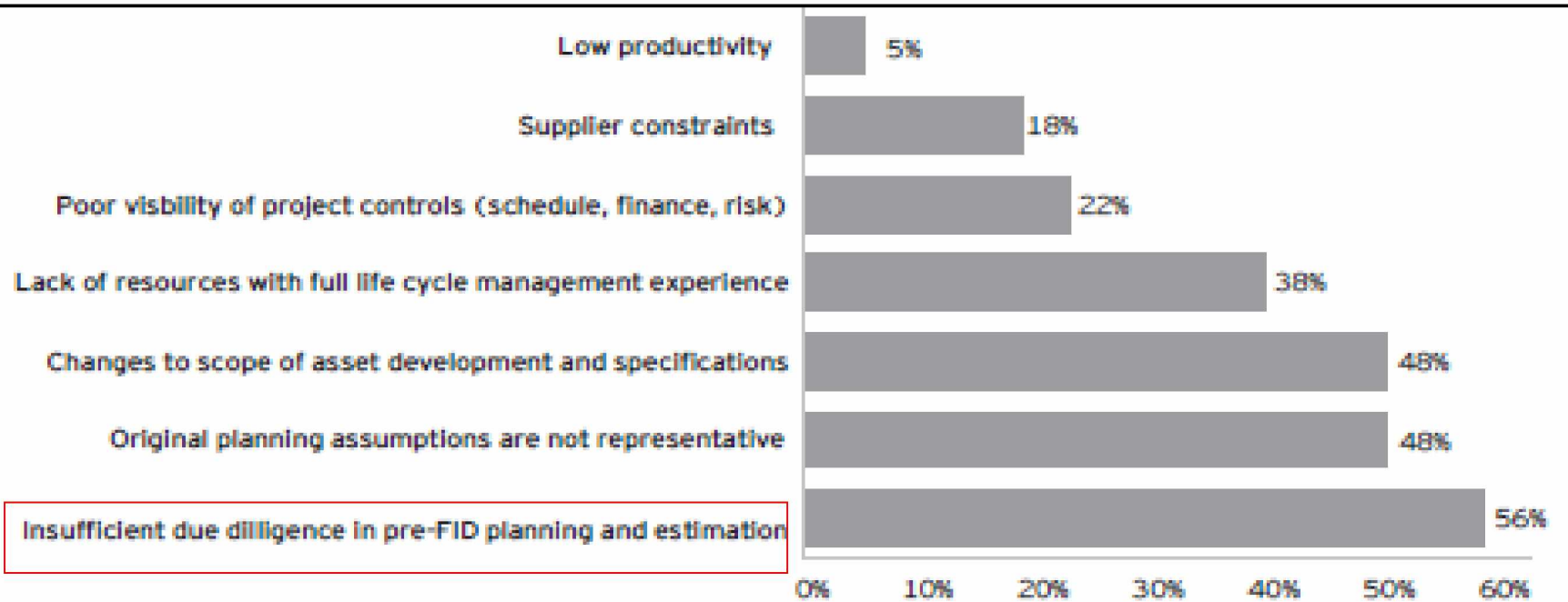


Conclusion: Be very careful what you ask for! Never assume people understand your instructions without confirming feedback, especially working in a multi-cultural environment! It could impact safety and/or quality!

Project Background

From an EY survey of major capital projects of Fortune 500 companies, a US government survey and the Gartner Group Survey:

- 50% of projects are over budget
- 58% of projects were delivered late
- 42% of projects experienced defects post completion
- 30% to 40% of a project's total cost is going to rework.

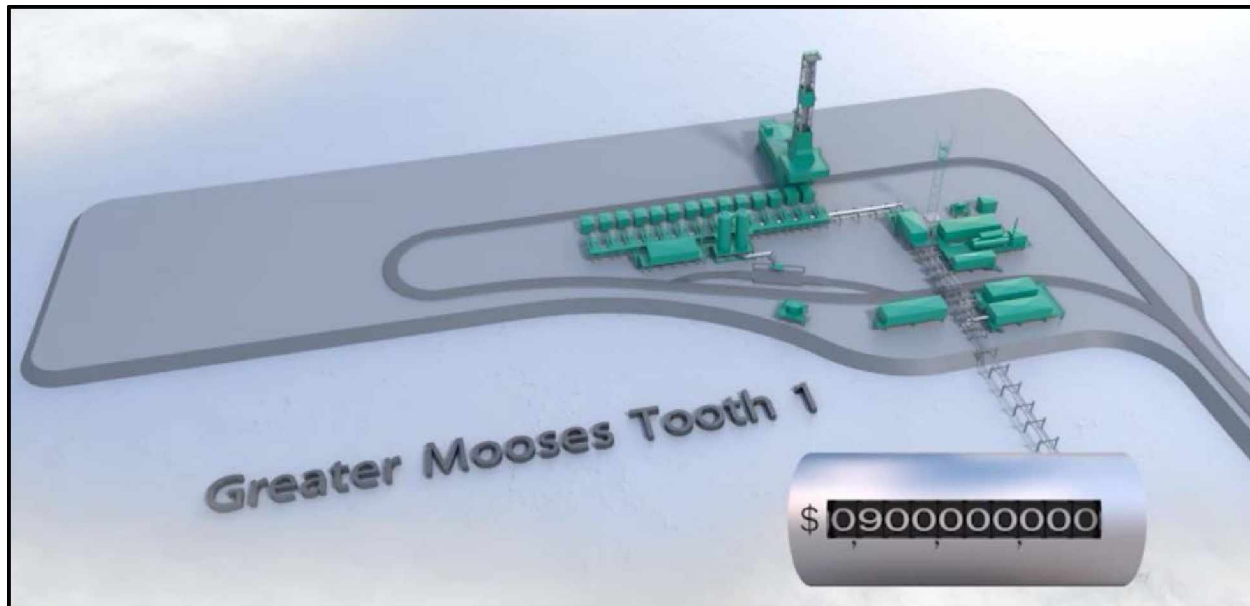


The typical risks that affect an organization's ability to deliver to Final Investment Decision (EY, 2014)

Project Objective and Scope

Produce a new project gate self-assurance review framework (SARF) for Alaskan oil & gas major projects to improve project delivery

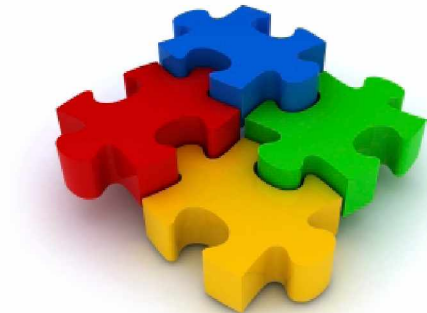
- Process to be a “cold-eye” review with internal Alaskan company subject matter experts (SMEs) at approval gates to assure the project will be successfully executed
- Designing it as an internal assurance review process (AR) creates an effective company improvement cycle and at a lower AR cost



New North Slope drillsite development “Greater Mooses Tooth 1” (ConocoPhillips, 2015)

Capstone Project Deliverables

- ✓ Project Management Plan
- ✓ Final Project Report
- ✓ Project Gate Self-Assurance Review Framework for Major Alaskan Oil & Gas Projects
 - Findings are valid and contribute to PM Body of Knowledge



Project Milestones

Current Project Key Metrics:

SPI: 1.00

WPI: 0.94

**RECEIVE
SPONSORSHIP
AND
SIGNED
COMMITTEE
AGREEMENT
JAN 2015**

**CREATE
PROJECT
MANAGEMENT
PLAN AND
PRESENT TO
STAKEHOLDERS
APR 2015**

**CREATE FINAL
RESEARCH
REPORT USING
COLLECTED
DATA AND
PRESENT TO
STAKEHOLDERS
NOV 2015**

**DELIVER FINAL
DOCUMENTS
AND CLOSEOUT
PROJECT
DEC 2015**

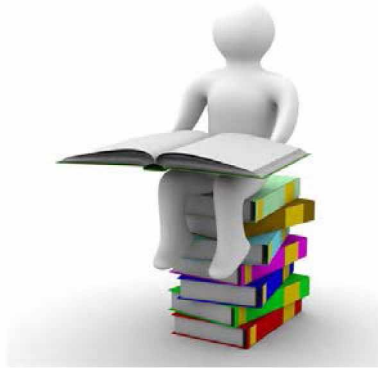
Planning

Execution

Closeout

Methodology

Literature
Review



- Perform Analysis
- Develop New Framework
- Vet by Stakeholders

Interviews



Final
Project
Report

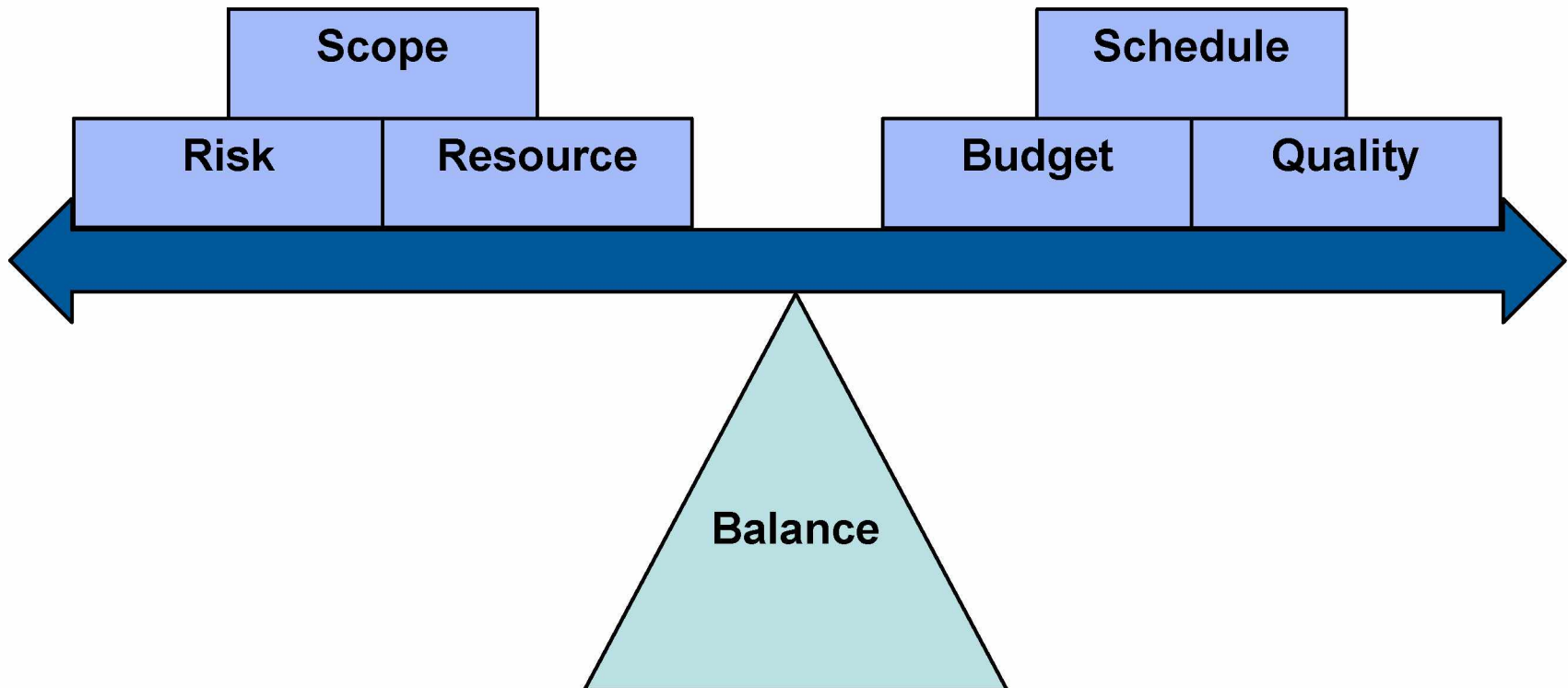
Literature Review

Literature review investigates following key questions:

- What are project gate assurance reviews?
- Why are assurance reviews important?
- What are challenges associated with assurance reviews?
- How can project reviews be streamlined to save cost and time?
- What key recommendations will improve an assurance review process?



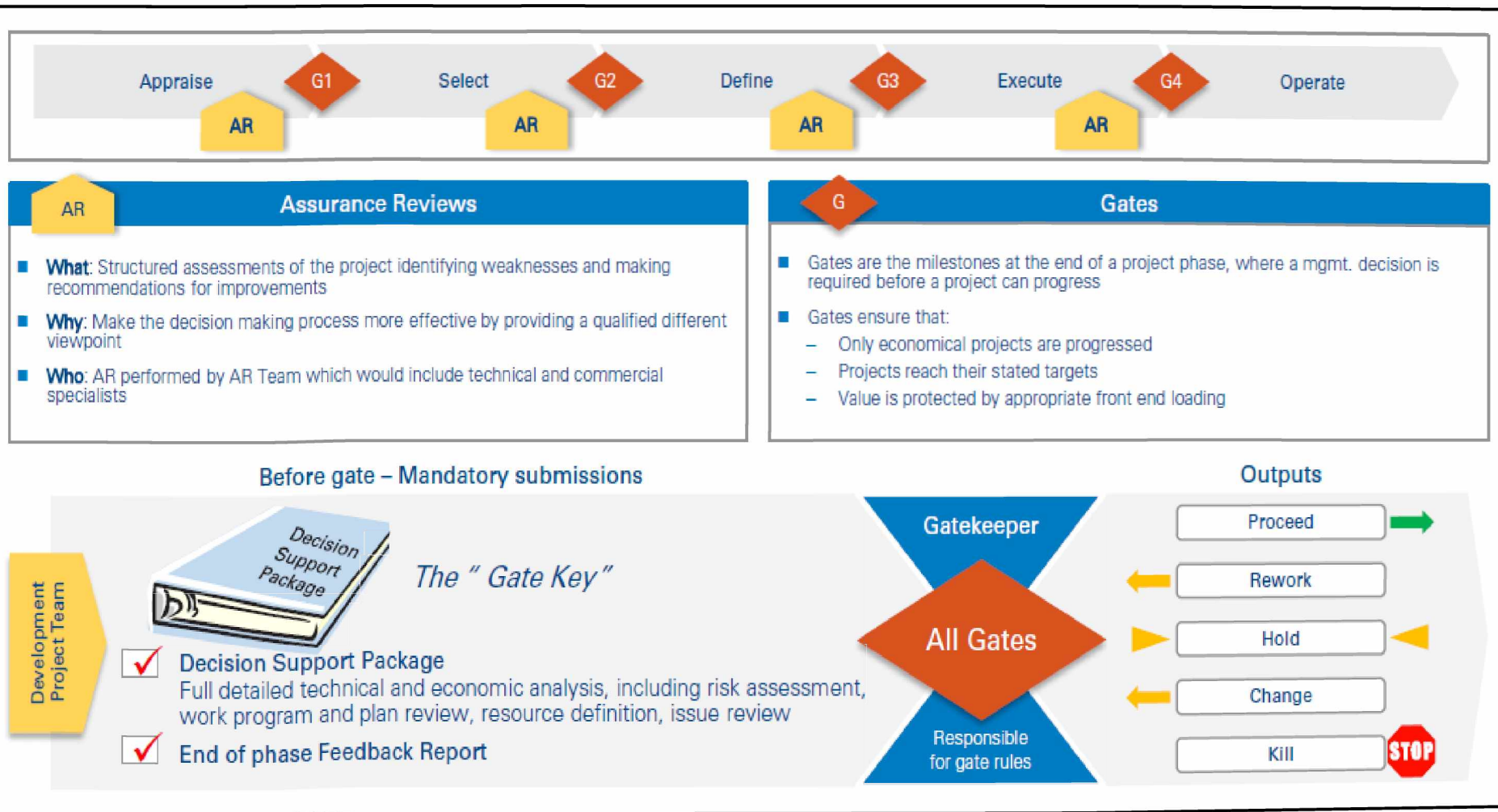
What are project gate assurance reviews?



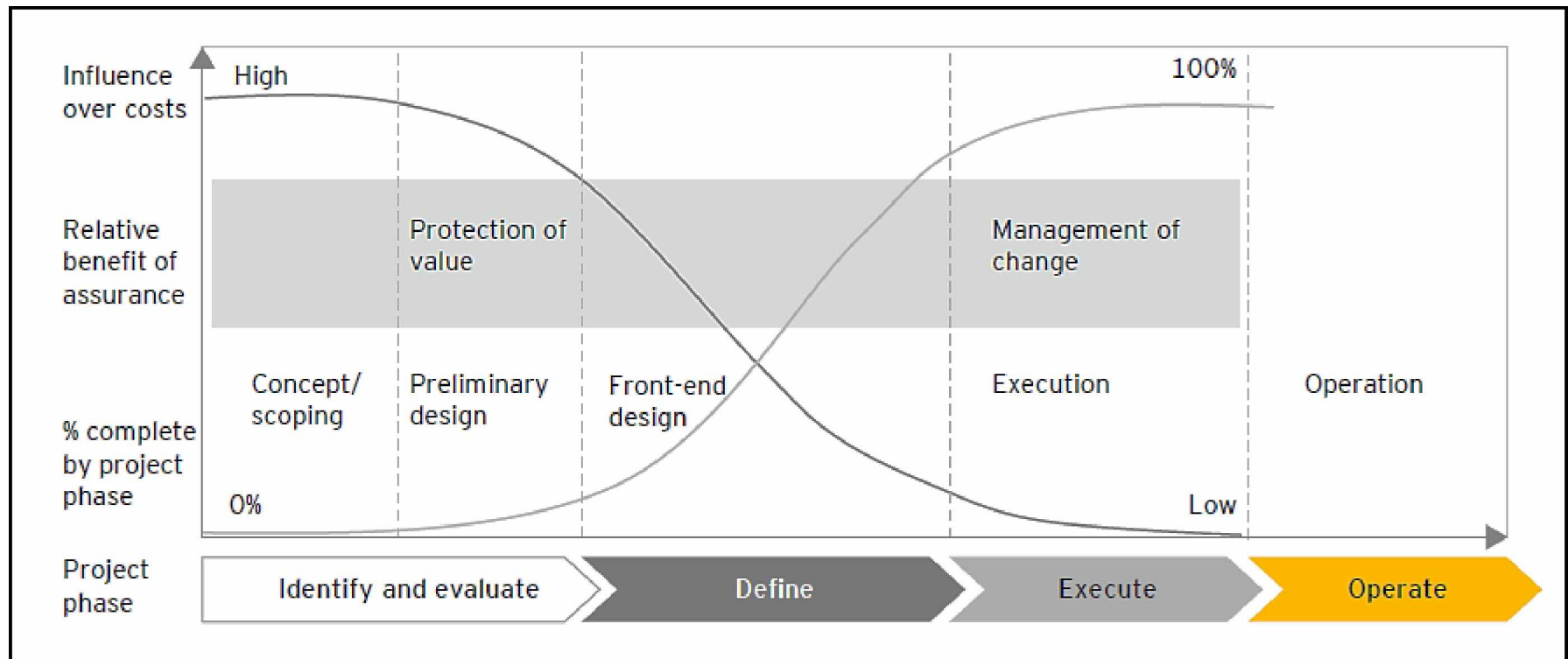
Project Gate Assurance Role

Did project team find the right balance for the current phase of the project?

What are project gate assurance reviews?



Why are assurance reviews important?



The link between influence over costs and the project stages (EY, 2014)

The earlier the issues are identified, the less likely are cost/ schedule overruns

What are challenges associated with assurance reviews?

- Lack of consistent and uniform project governance philosophy
- Lack of decision board
- Lack of structured assurance review and gate process
- Lack of expertise in review team
- Lack of review time, especially for review team



How can project reviews be streamlined to save cost and time?

- Leverage local company expertise rather than external reviewers
- Employing internal local SMEs can save time
 - Accustomed to and familiar with execution of Arctic projects
 - Experienced with prior project successes, failures, and issues
- Benefit of local assurance review team (ART) membership
 - Staff are located in the same office which facilitates effective communication
- By hosting such reviews using in-house personnel, a corporation deepens its organizational capability



What key recommendations will improve an assurance review process?

- Follow a structured assurance review process – fit for purpose for project at hand
- Work collaboratively between project management team (PMT) and ART
- ART experienced in type of project being assured
- Sufficient time review dedicated by ART



Interviews



- Individual AR History
- AR suggestions
- Open-ended questions

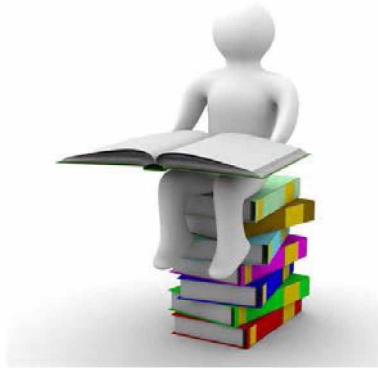


- 10 experienced professionals in ARs
- Face-to-face interviews during summer 2015



Methodology

Literature
Review



- Perform Analysis
- Develop New Framework
- Vet by Stakeholders

Interviews

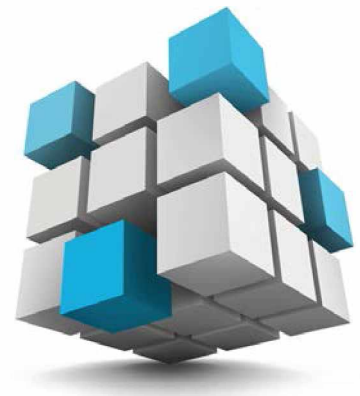


Final
Project
Report

Analysis:

Self-Assurance Review Framework Requirements

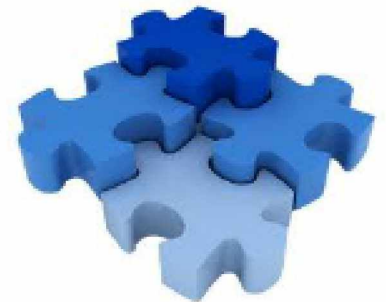
- Process needs to be simple and well-structured
- Clear expectations need to be negotiated upfront between PMT, ART, and decision board (DB)
- Review process timeline needs to be agreed to
- Decision support package (DSP) needs to be detailed and well-organized representing current phase of project, available well prior to review
- PMT needs be open-minded, transparent, receptive to feed well versed in project scope



Analysis:

Self-Assurance Review Framework Requirements

- ART needs to be competent and experienced in Arctic oil and gas projects and review DSP prior to assurance review
- AR meeting needs to be free flowing discussion, while still following a set agenda, rather than canned presentations by PMT
- Findings need to be documented, categorized, reviewed and followed-up by PMT
- Management needs to allocate time for ART SMEs to perform the review. In addition, recognition and ART needs recognition in annual performance review cycles

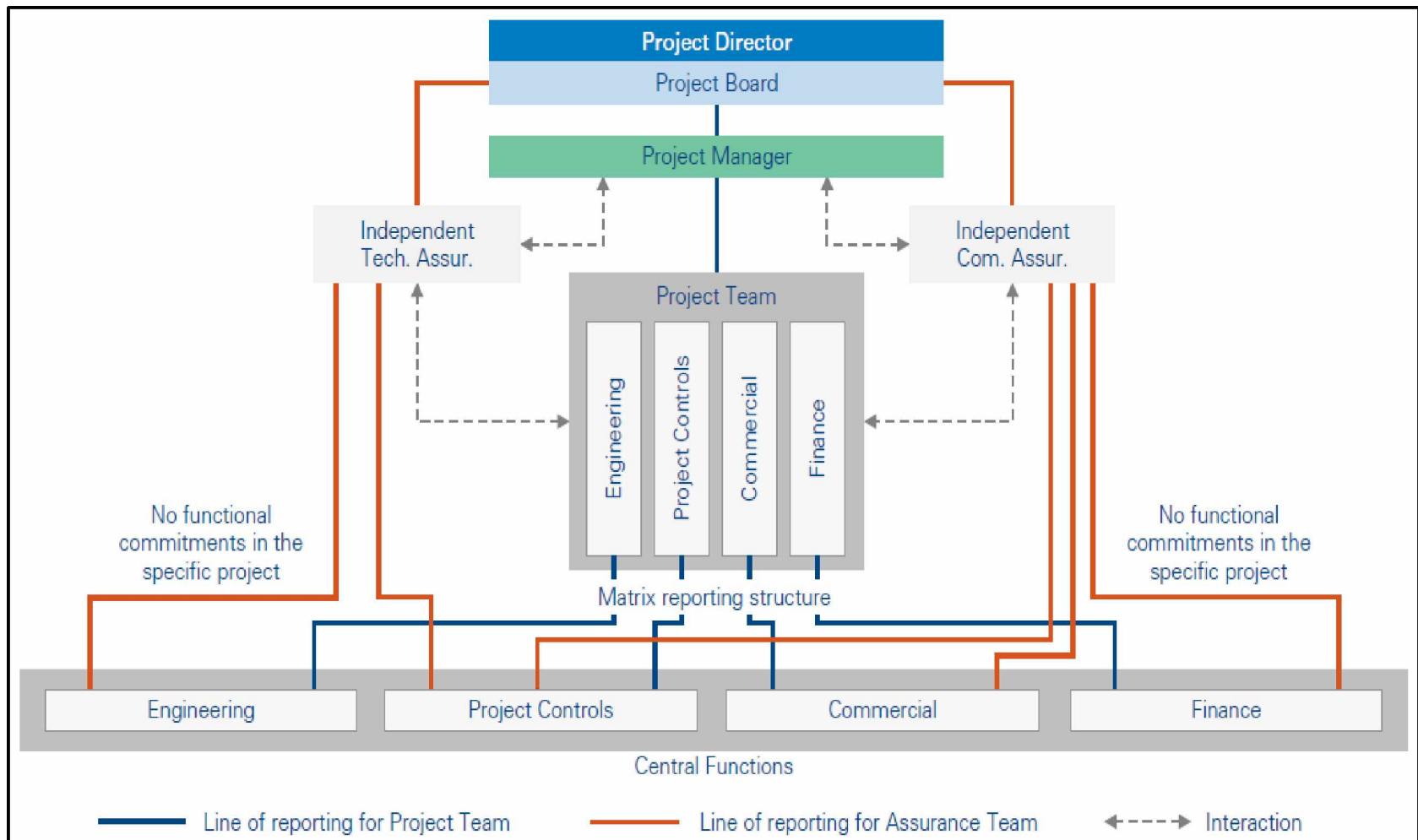


Analysis: Effective ART Characteristics

- Local Alaska subject matter experts
- Experienced in type of project being reviewed
- Constructive communicators
- In addition to identifying problems, propose solutions and recommendations
- Independent of PMT, reports to decision board (DB)

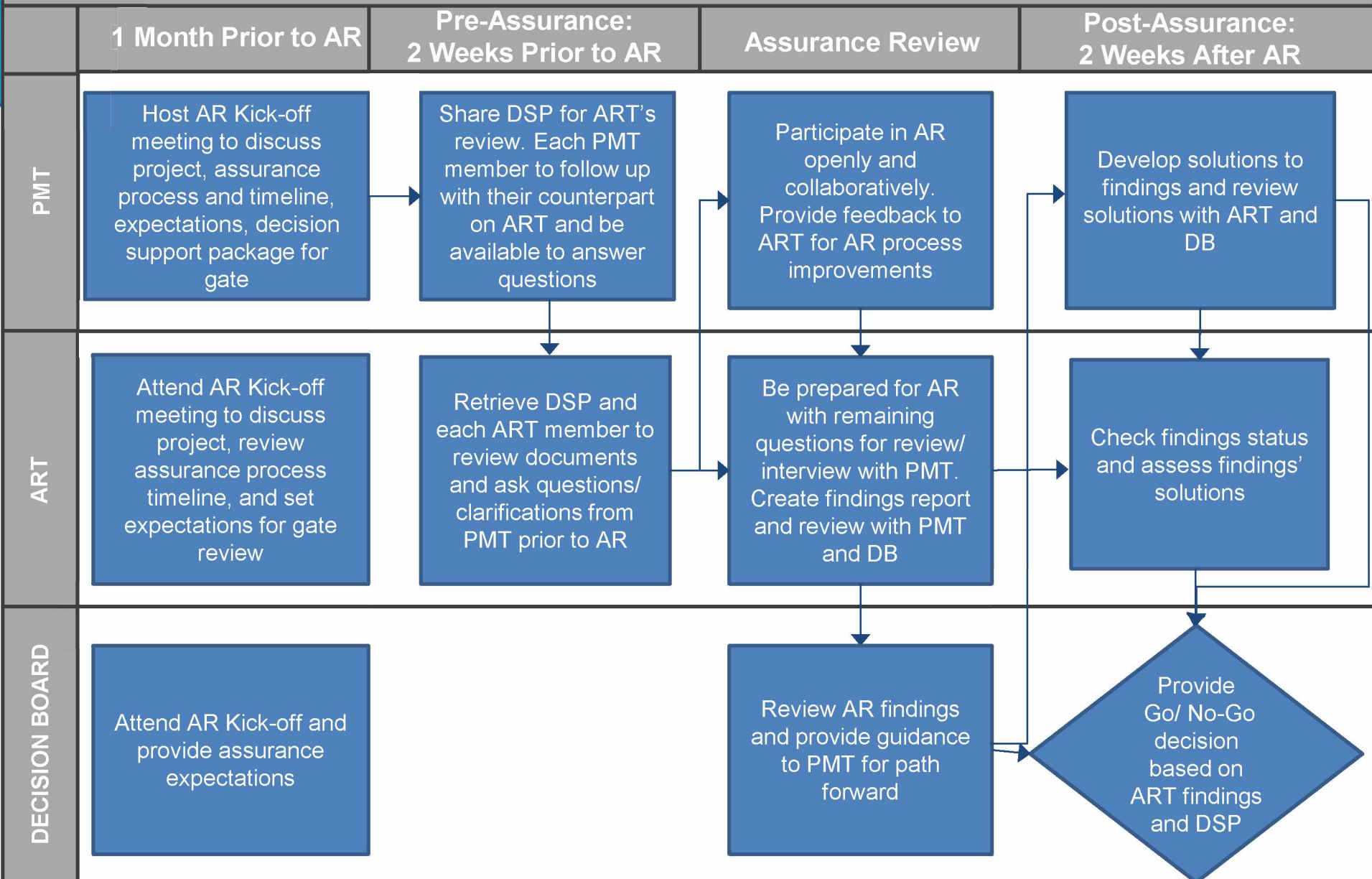


Analysis: Effective ART Characteristics



Good practice project governance and assurance (Suresh, Dutto, Kruse, Rogers, 2013)

Proposed Project Gate Self-Assurance Framework



Recommendations for Further Work

Adapt generalized SARF into a company-specific AR process incorporating following:

- Selection process for ART
- Decision on ART funding
- Documentation required for review based on company processes
- Standardized template or score card for evaluating all disciplines, which defines key deliverables by phase gate
- Establish clear expectations regarding the review
- Method to track AR findings (low, medium, high) and consequences



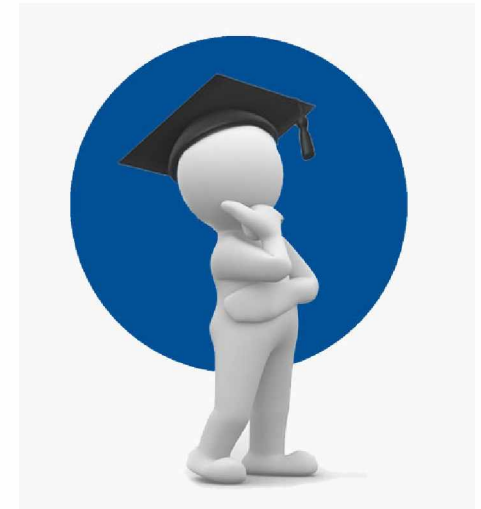
Capstone Project Critical Success Factors

- PPM deliverable requirements are met on time
 - Key Performance Indicators
 - Schedule Performance Index Threshold $0.8 < SPI > 1.2$
 - Work Performance Index Threshold $0.8 < WPI > 1.2$
- New project gate self-assurance review framework for Alaskan oil & gas major projects reviewed and approved by stakeholders
 - >90% positive feedback from Sponsor and advisory committee
 - Findings are valid and contribute to PM Body of Knowledge



Lessons Learned

- Acquire company legal counsel approval early in project, if required
- Start communication early with stakeholders for buy-in and involvement
- Start IRB process early in project
- Create a realistic plan and stick with it
- Treat Capstone class I and II as a regular project



THANK YOU FOR ATTENDING !

What Questions Do You Have?



Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Lessons Learned

Authored by: Bertus, Anca R
PM 686B

Lesson ID: 01

Descriptive Lesson Learned Title: Project Manager to use time management effectively

Keywords: Schedule, plan

Knowledge Areas Impacted: Time Management

Document Impacted: PPM deliverables

Project Process Category: Execution

Lesson Learned Summary (Problem, Solution, and Result):

Estimating activities can be difficult without previous experience in the type of activities that need to be estimated. It is important to keep float available for activities that the duration is not clear so that the project manager does not run into a crunch rushing to finalize a set of deliverables. As rushing can only lead to a reduction in the quality of the product produced and even, omissions that are clearly required.

Recommendations:

In order to avoid change and deadline misses, the project manager should review the schedule on weekly basis and ensure is on track and plenty of float is allocated for the remaining deliverables. Only through continuous planning, a project can be successfully delivered.

Lesson ID: 02

Descriptive Lesson Learned Title: Project Manager to communicate effectively with stakeholders for buy-in and involvement

Keywords: Stakeholder management, communication, proactive start

Knowledge Areas Impacted: Stakeholder management, communications management

Document Impacted: project schedule, PPMs

Project Process Category: Execution

Lesson Learned Summary (Problem, Solution, and Result):

The project manager needs to ensure sufficient interview responses are received in Execute phase, thus it's crucial to communicate with prospective stakeholders regarding the project and to receive their buy-in to collaborate as interviewees early in the project. Also, depending on the type of project, the stakeholder discussions might be required as follow-ups.

Recommendations:

Conducting interviews are only permitted after obtaining IRB approval, but discussions with prospective interviewees regarding the project and possible support should start early in order to ensure enough data is captured. Communication with stakeholders needs to start as soon as they have been identified through the Stakeholder Analysis.

Lesson ID: 03

Descriptive Lesson Learned Title: Project Manager to start IRB process early in the project

Keywords: project risk, IRB review process

Knowledge Areas Impacted: Time management, risk management

Document Impacted: project schedule, PM 686B PPMs

Project Process Category: Planning

Lesson Learned Summary (Problem, Solution, and Result):

The capstone project can be delayed due to IRB approval, thus it's important to understand the IRB approval process well early on. For current project, the project manager passed the IRB test earlier than required per syllabi in order to ensure enough time for the IRB deliverables and review cycle. University of Alaska IRB determined that the project does not required approval as it does not meet the definition of human subject research under the IRB regulations.

Recommendations: The project manager should start the IRB approval process early in the project and ensure all activities have been added to schedule: IRB test, IRB documents (IRB proposal, consent form, survey, interview guideline, etc.) approved by primary advisor, IRB documents submitted for IRB approval, etc.

Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Selected Knowledge Areas

Authored by: Bertus, Anca R

PM 686B

Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Follow the approved Project Management Plan
- Ensure all documentation is up to date

Performance Measurement:

- On time updates of all documents required including PMP
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686B

Performance demonstrated during PM 686B:

- Project deliverables have been completed and delivered per schedule
- All PPM deliverables have been integrated into the updated PMP
- Throughout the project, the approved PMP was followed
- Successful direction and management of project work by project manager
- The findings and the self-assurance framework have been vetted by the project stakeholders

➤ Project Time Management

Application:

- Monitor and control schedule as its time critical for the deliverables to be completed by November timeframe in order to be able to graduate from the PM Master

Performance Measurement:

- Control schedule by doing tri-weekly updates
- Monitor project progress vs. baseline
- Maintain project execution on planned schedule by calculating SPI at each status report and show the variances

Performance demonstrated during PM 686B:

- Schedule is on target with the baseline set
- The project is at 100% completed, with an SPI of 1 and WPI of 0.94

- Some tasks have been underestimated originally, thus I had to work extra hours in order to stay on track with the PPM due date
- A comparison of scheduled work hours vs. actual hours performed is done (304 vs. 325 hours)
- Interviewees were scheduled during the Summer 2015 to have enough time to create the remaining deliverables, final report and self-assurance framework
- Multiple updates and refinements were made to the schedule to include additional details on the actual work

➤ Project Communication Management

Application:

- Identify additional stakeholders
- Follow the approved communication plan
- Distribute information timely as per plan
-

Performance Measurement:

- Keep a log of stakeholder expectations
- Communicate with stakeholders per plan
- Keep track of # of times I am unprepared for the status report

Performance demonstrated during PM 686B:

- All comments have been incorporated into the project management plan and presentation
- Communication with stakeholders was done per communication plan with the various stakeholders and ad hoc meetings when necessary
- Interviewees were done with Alaskan professionals with experience in major projects delivery. Also, a follow-up in order to review the self-assurance framework product and get their buy-in
- All PPM deliverables were reviewed with advisor and committee members
- Continue to be 0 for # of times I have not been prepped for the status report

Project Gate Self-Assurance Review Framework for Major Alaskan Oil and Gas Projects

Project Management Plan

Authored by: Bertus, Anca R

PM 686B

Rev. No.	Date	Reviewed By	Approved By	Description
0	4/8/15	Committee	Sponsor	Issued for Use
9	11/30/15			Updated for PM686B Final Deliverables

Table of Contents

1.	PROJECT OVERVIEW	3
1.1.	PROJECT DESCRIPTION.....	3
1.2.	PROJECT OBJECTIVES.....	3
1.3.	PROJECT SCOPE	3
1.4.	PROJECT ASSUMPTIONS	4
1.5.	PROJECT CONSTRAINTS.....	4
1.6.	PROJECT EXCLUSIONS	5
1.7.	CRITICAL SUCCESS FACTORS	5
2.	SCOPE MANAGEMENT PLAN.....	5
2.1.	WORK BREAKDOWN STRUCTURE.....	6
3.	RISK MANAGEMENT PLAN	6
3.1.	RISK REGISTER.....	8
4.	QUALITY MANAGEMENT PLAN	10
4.1.	QUALITY METRICS	10
5.	TIME MANAGEMENT PLAN	11
5.1.	PROJECT MILESTONE SCHEDULE	11
6.	STAKEHOLDER MANAGEMENT PLAN.....	13
6.1.	ORGANIZATIONAL BREAKDOWN STRUCTURE.....	13
6.2.	STAKEHOLDER IDENTIFICATION AND ANALYSIS	14
6.3.	POWER/ INTEREST GRID WITH IDENTIFIED STAKEHOLDERS	15
7.	COMMUNICATIONS MANAGEMENT PLAN	16
7.1.	COMMUNICATION MATRIX	16
8.	PROJECT MONITOR AND CONTROL PLAN	16
8.1.	STATUS REPORTS.....	16
8.2.	STATUS REPORT CYCLE	17
8.3.	REQUIREMENTS TRACEABILITY MATRIX	17
8.4.	METHOD FOR MEASURING PROJECT PROGRESS.....	17
8.5.	SUBSIDIARY PLANS FOR 3 KNOWLEDGE AREAS	17
9.	CHANGE MANAGEMENT PLAN	17
9.1.	CHANGE MANAGEMENT PROCESS	18
10.	COST MANAGEMENT PLAN	21
11.	HUMAN RESOURCES MANAGEMENT PLAN.....	21
12.	PROCUREMENT MANAGEMENT PLAN	21
13.	CLOSEOUT MANAGEMENT PLAN.....	21
13.1.	LESSONS LEARNED	22
14.	DOCUMENT CONTROL	22
15.	APPENDICES	24
I.	ABSTRACT	24
II.	PROJECT CHARTER.....	25
III.	SPONSOR LETTER.....	35
I.	SIGNED STUDENT/ ADVISORY COMMITTEE “CONTRACT”	36
II.	RESEARCH SOURCES AND KEY WORDS	42
III.	EXPECTED RESEARCH METHODS, RESULTS, AND APPROACH TO ANALYSIS	43
IV.	EXPECTED PROJECT DELIVERABLES AND OUTCOMES.....	44

V.	ADVISOR-APPROVED RESEARCH INSTRUMENTS AND ANALYSIS METHODOLOGY	45
VI.	PROJECT REQUIREMENTS (TRACEABILITY MATRIX) DOCUMENTATION	46
VII.	CONSENT FORM.....	48
VIII.	INTERVIEW PROTOCOL	50
IX.	IRB APPROVAL DOCUMENTATION	54
X.	STATUS REPORTS	55
XI.	APPLICATION & PERFORMANCE OF 3 KNOWLEDGE AREAS	63
XII.	APPLICATION & PERFORMANCE OF 3 KNOWLEDGE AREAS FOR PM686B.....	67
XIII.	PROJECT SCHEDULE	75
XIV.	WORK BREAKDOWN STRUCTURE.....	76

Disclaimer: The work done for this project is for an independent academic endeavor only. The project documents contain obscured identity references because one of the project's main objectives is to maintain the confidentiality of the information and of the sources of information.

1. Project Overview

1.1. Project Description

Major capital projects can fail or have poor outcomes including significant cost and schedule overruns if the projects have not been through a comprehensive project approval gate assurance review with Subject Matter Experts (SMEs) where all design, construction, commissioning, and operational issues (including external factors such as extreme weather conditions) have been properly addressed. Given the current economic climate, a more time efficient local assurance review framework would increase value derived from local assurance reviews.

1.2. Project Objectives

This project will create a new project gate assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with SMEs at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on schedule, and within scope. While external consultants are available to conduct such reviews, this process will be designed as an internal assurance review process in order to create a good improvement cycle employing internal local SMEs who are accustomed to and familiar with the execution of arctic projects, and familiar with prior project successes and failures.

1.3. Project Scope

The project will include a literature review of assurance review processes followed by an analysis of the interviews conducted with local Alaskan project professionals experienced with major projects delivery using interview guidelines written for this project.

Academic Related Deliverables	Project Deliverables
Project Management Plan & Plan presentation	Project gate assurance review framework applicable to major Alaska Oil and Gas companies
Research/Project Report & Report presentation	

Final written project report (20-35 pages) and Appendices	
Final Project PowerPoint Presentation	
Project Lessons Learned Narrative (2-3 pages)	
Selected Knowledge Areas (3-4 page narrative)	
Project Charter	
Project Sponsor Letter	
Digital Media files containing a complete set of deliverables.	

Table1. Project Deliverables

1.4. Project Assumptions

- Project Manager has access to necessary software programs (Microsoft Office, WBS Chart Pro, Blackboard, Google Docs).
- Advisors will be available to review and give constructive feedback on draft project deliverables.
- There is sufficient literature on the topic to allow for a thorough literature review.
- Interviewees are responsive and collaborative throughout the entire duration of the project.
- Project Stakeholders have adequate time to review and approve project deliverables.

1.5. Project Constraints

	<u>Time</u>	<u>Effort</u>	<u>Scope</u>
Hard	★		
Adjustable			★
Soft		★	

Table2. Project Constraints

- Project Progress Milestone (PPM) dates as specified in 686A and 686B syllabi
- Advisor and committee members time availability
- Scope can be adjusted as long as proper change management is done.

1.6. Project Exclusions

- The project neither discloses confidential information nor uses it in the final written report.
- No more than 10 persons will be interviewed and their individual answers will not be disclosed.
- Interview answers will neither be published nor shared with the stakeholders. They will be used without any references and for analysis purposes only.
- The project does not include presenting the project findings to stakeholders outside of the identified stakeholder group. Closing procedures associated with organizational stakeholders is out of scope.
- The project report will not be published in a scholarly journal.

1.7. Critical Success Factors

- The project delivers the required Project Progress Performance Milestones (PPMs) on time, per program requirements.
- The analysis is completed at the end of the project (December 2015) and a conclusion is reached.
- The project stakeholders maintain their support of the project and collaboration with the project manager.
- Stakeholders and committee members communicate effectively, adhering to agreed communication requirements.
- The research paper follows research ethics code and standards, and is based on factual data, ethically analyzed.
- The project is managed in accordance with Project Management practices and academic department expectations.
- Award of “go” decision is achieved at academic Go/No-Go decision gates.

2. Scope Management Plan

The Scope Management Plan is in place in order:

- To ensure deliverable acceptance
- To provide a detailed description of each project activity.

Deliverables Acceptance Criteria

Research Report	<ul style="list-style-type: none"> • 20-35 pages long, written according to academic standards • >90% positive feedback from advisory committee and Sponsor • Findings are valid and contribute to the PM Body of Knowledge
Project gate self-assurance review framework	<ul style="list-style-type: none"> • Create a new project gate self-assurance review framework for major Alaska Oil & Gas projects • Findings contribute to the PM Body of Knowledge

Table3. Acceptance Criteria

2.1. Work Breakdown Structure

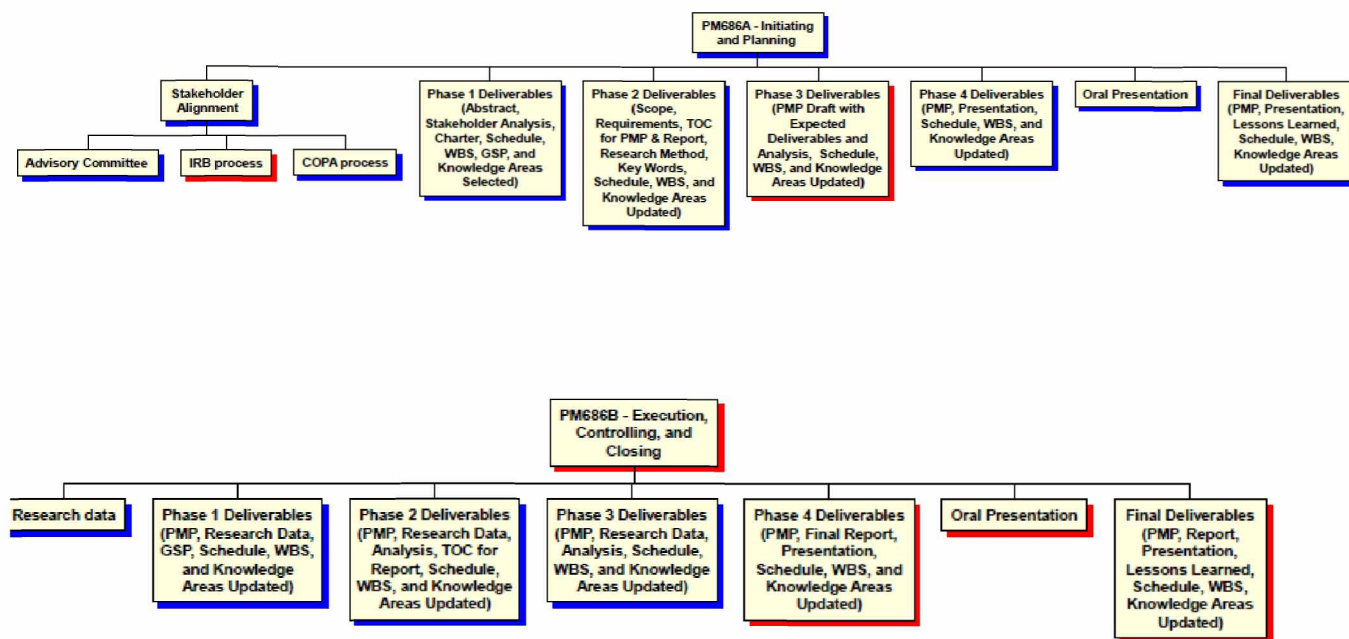


Figure1. Work Breakdown Structure

The detailed Work Breakdown Structure is in Appendix XIV.

3. Risk Management Plan

The overall Risk Management plan objective is to identify risks long before they occur so that effective mitigation measures can be implemented and appropriate contingency plans prepared. Risk Management will continue to be used throughout the project to ensure all risks to project success are identified, quantified, and have an appropriate mitigation strategy. Risk Management will also be used to ensure:

- Any mitigation activities are assessed and appropriately communicated
- Risk management becomes an integral element of the project management processes
- Risk mitigation reduces risk impacts to the degree possible
- Apply approach equally to opportunities, not just to threats

This approach increases the probability of achieving overall project objectives.

The project intends to utilize the following process:

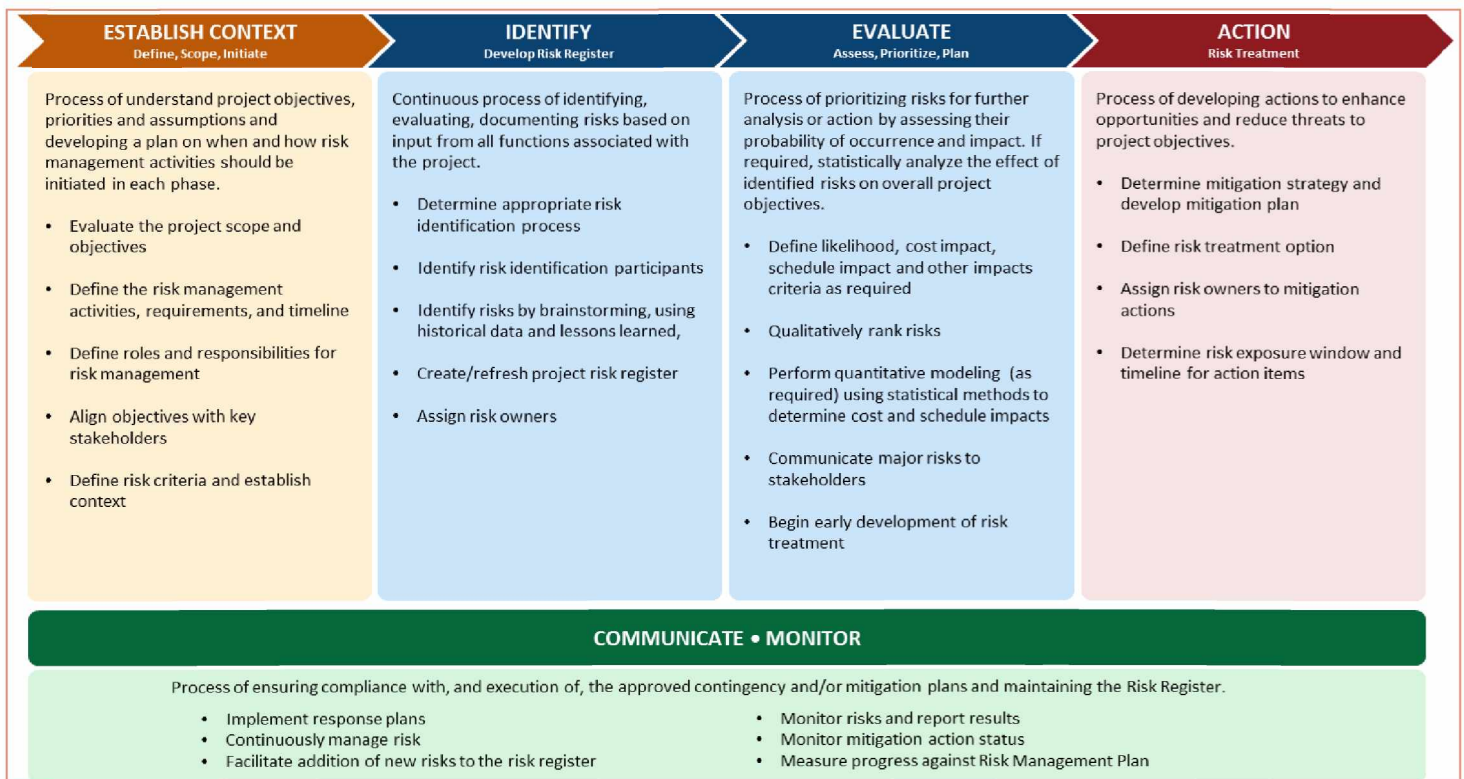


Figure2. Risk process

3.1. Risk Register

The risk register below provides information on the risks applicable to this project:

PROJECT RISKS											
RISK ASSESSMENT AND MITIGATION MATRIX											
Risk Description	Probability	Impact	Ability to Manage	Mitigation Plan	Residual Probability	Residual Impact	Ability to Manage	Trigger / Response Plan	Risk Owner	Status of Risk	Completion Date
Committee Advisor time availability	M	H	L	Inform Committee Advisor of PMP deliverables expected review dates via class announcement, e-mail, phone, UAA collaboration area web site, and UAA PPM & deliverables web site.	L	L	H	Committee advisor not responding to project manager with PPM comments / recommendations.	Project Manager	Addressed	11/30/2015
Interviewers participation	H	H	L	Coordinate with local Alaskan project professionals to acquire support.	L	L	H	Interviewers do not reply with signed consent form.	Project Manager	Addressed	9/1/2015
Adequate survey questions	M	H	H	Generate questions with qualified SME and review with committee advisors	L	L	H	SME response not sufficient to complete project deliverables as specified	Project Manager	Addressed	8/1/2015

Critical Resources review / recommendations	M	H	L	Review project schedule with committee team to acquire approval and generate Student / Advisory Committee Contract	L	L	H	Committee team not responding to project manager with PPM comments / recommendations.	Project Manager	Addressed	2/16/2015
Acquire Project Management Software	L	H	M	Download demo versions from websites and UAA Faculty Staff	L	L	H	Website demo versions not adequate for project WBS and schedule.	Project Manager	Addressed	01/23/2015
Company Legal Counsel support	M	H	L	Verify project deliverables are not proprietary to the company. Set up meeting to discuss project deliverables prior to PM686A class completion and at PM686B project conclusion.	L	L	H	Schedule meeting with company Legal Counsel prior to completion of both PM686A and PM686B classes.	Project Manager	Addressed/ See CR#1	03/6/2015
Project Manager time availability to develop, review, modify, and submit project deliverables	H	H	M	Re-baseline project execution schedule which enables Project SOW completion with deliverable dates as specified in PM686B syllabus.	M	H	H	Project Manager behind on PPM submittals	Project Manager	Addressed	11/30/2015

Project Manager submittal of Quality Paper in PM 686A/B PPM#3	M	M	H	Submit preliminary working draft to advisory committee for review.	L	L	H	Add committee advisory review task to schedule and inform via collaboration area and email.	Project Manager	Addressed	11/06/2015
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Table4. Risk Register

The risk scale is a 3X3 probability grid: Low, Medium, and High. Low and Medium probability risks are managed directly by the project manager and the project sponsor is an informed party. High probability risks are managed jointly by the project manager and the project sponsor with direct oversight with the project manager providing input and doing the execution steps for mitigation.

	Low	Medium	High
High			
Medium			
Low			

4. Quality Management Plan

The quality plan objectives are the following:

- To ensure achievement of critical success factors through analysis and planning
- To develop project quality metrics and track progress against these metrics
- To support best practices in project quality management.

4.1. Quality Metrics

ID	Critical Success Factors	Potential Quality Metric	Priority
1	Deliverables submitted on time	Finish date variance equals zero for every task associated with completing a deliverable	High
2	Data collection and analysis is complete by September 18, 2015 and findings	Finish date variance equals zero for WBS 2.1.1, 2.1.2, 2.1.3	High

	are summarized.		
3	Timely communication with advisory committee	90% acceptance	High
4	Deliverables are approved by advisers and Sponsor	"Go" decision upon decision gate	High

Table5. Quality Metrics

5. Time Management Plan

The schedule consists of both academic and project activities in order to ensure that the project is completed on schedule. The Project Manager is the sole active resource of the project that receives guidance and assistance from the advisory committees.

The project schedule is continuously maintained in Microsoft Project with snapshots done every three weeks. It will be used to:

- Establish activity durations and relationships
- Visually display the project timeline and relationships
- Provide a means of reflecting actual progress against planned and baseline changes
- Identify potential scheduling impacts caused by resource (critical path elements)
- Manage scope change effects on the schedule
- Addresses interfaces between functional areas and contractors with logic relationships between activities (start to start, start to finish, etc.)

The overall project schedule:

- Is consistent with the WBS developed for the project
- Is resource-loaded
- Defines major deliverables for each of the project phases
- Identifies reviews such as IRB review, PPM reviews, weekly updates.

5.1. Project Milestone Schedule

Below are the Major Milestones for the project:

MAJOR MILESTONES	
MILESTONE/ DELIVERABLE	TARGET DATE
PM 686A Initiating and Planning (January 16, 2015 thru April 29, 2015)	
Sponsor Letter Signed	January 27, 2015
Advisory Committee Selected and Approved	January 27, 2015
Submit PPM#1	<u>January 30, 2015</u>
Submit PPM#2	<u>February 20, 2015</u>
Submit PPM#3	March 13, 2015
Go Decision #1	<u>March 18, 2015</u>
IRB Submittal	<u>March 27, 2015</u>
Submit PPM#4	<u>April 10, 2015</u>
IRB Approval	April 10, 2015
Go Decision #2	<u>April 15, 2015</u>
Final Oral Presentation	<u>April 20, 2015</u>
Final Project Deliverables	<u>April 27, 2015</u>
PM 686B Executing, Controlling, and Closing (September 04, 2015 thru December 07, 2015)	

Submit PPM#1	<u>September 18, 2015</u>
Submit PPM#2	<u>October 9, 2015</u>
Submit PPM#3	<u>November 6, 2015</u>
Go Decision #1	<u>October 14, 2015</u>
Submit PPM#4	<u>November 20, 2015</u>
Go Decision #2	<u>November 25, 2015</u>
Final Oral Presentation	<u>November 30, 2015</u>
Final Project Deliverables	<u>December 9, 2015</u>

Table6. Milestones Schedule

The project Gantt chart is provided in the Appendix XIII.

6. Stakeholder Management Plan

Stakeholder management procedures will ensure a systematic, controlled, and documented approach for engaging stakeholders and resolving stakeholder issues.

Stakeholder involvement is critical to the project's success. The Project Manager will be the primary interface with the Stakeholders.

The Stakeholder Analysis will be updated based on additional communication and project requirements.

6.1. Organizational Breakdown Structure

PROJECT SPONSOR
MM Project Engineering Manager

PROJECT MANAGEMENT
Anca Bertus Project Manager

ACADEMIC ADVISORY COMMITTEE		
Roger Hull Primary Advisor	Steve Hatter Committee Member	William Spindle Committee Member

Table7. Internal Organizational Chart

Organization	Name of Liaison/Interface
Oil & Gas companies	Not disclosed
Interviewers	Not disclosed

Table8. External Stakeholder

6.2. Stakeholder Identification and Analysis

Stakeholders	Rapport	Needs	Expectations
Project Engineering Manager	Sponsor/ Approver	COMPANY policies and procedures to be followed. Keep informed of progress and changes. Follow approval process for involving additional stakeholders.	Produce comprehensive data analysis and report conforming to professional standards.
Subject Matter Experts (SMEs)	Interviewed personnel	Agreement to take part in interview. Survey questions are clear and concise. Sufficient time is given to answer the interview questions.	Produce comprehensive data analysis and report conforming to professional standards. No interviewee names or other identifications will be shown in any of the documents created for the capstone class.
UAA Professors LuAnn Piccard/ Roger Hull/ Seong Dae	Instructor	Quality deliverables on due date. Full participation during classes.	Conform to MSPM capstone requirements and standards. Meet schedule and manage change.

Kim			
UAA Advisors Roger Hull/ Bill Spindle/ Steve Hatter	Advising Committee	Signed Student/ Advisory Committee Contract Meet regularly per plan for feedback and progress updates.	Conform to MSPM capstone requirements and standards. Meet schedule and manage change.
IRB committee	IRB	Timely submittal of survey and interview questions.	Conform to IRB standards.
PM Administrative Support Staff	Administrators	Adhere to course reporting and communication requirements Submit required paperwork on time.	Maintain high level of professionalism and adhere to administrative reporting requirements.

Table9. Stakeholder Identification and Analysis

6.3. Power/ Interest Grid with Identified Stakeholders

Power	High	Keep Satisfied SMEs UAA Professors IRB	Manage Closely Project Engineering Manager UAA Advisors
	Low	Monitor PM Administrative Staff	Keep Informed
		Low	High
		Interest	

Figure3. Power/ Interest Grid

7. Communications Management Plan

The Communications Plan defines the structure for communication, coordination, and control of information during the project life cycle. The project requires timely flow of information and the assurance of effective controls. Managing relationships is a key factor in ensuring successful execution of the project. How the project manager communicates with the team, SMEs, and other leads will largely determine the quality of relationships and the success of the project. The communications plan will allow the team to maintain open and robust communications with all stakeholders, and will achieve this through a combination of software/hardware systems and processes.

7.1. Communication Matrix

I D	Communication	Description	Frequency	Format	Recipient/ Attendees
1	Internal Status Reports	Internal status reports for the advisory board	Once in three weeks	Dashboard, 3 minute briefing	PM 686 professors and students
2	External Status Reports	Overall project progress and consultations with Sponsor	Once, then as required to address change requests	Face to Face Meetings	MM
3	Consultations with advisory committee	Consultations to support the project progress, clarify academic requirements, discussion of best practices	Once every two weeks or as needed	Face to Face Meetings/ Emails/ Phone calls	Advisory Committee
4	Interviews / Discussions	Interviews with SMEs	Once	Email/phone calls/video conference	SMEs

Table10. Communication Matrix

8. Project Monitor and Control Plan

8.1. Status Reports

Academic status reports will be given as scheduled in the class syllabus (see Appendix XII for dashboard status reports). Additional Status reports will be given at the request of the project sponsor and/or advisor. The ad-hoc status reports will be brief, addressing

current status, progress, issues encountered, and areas where sponsor's/advisor's help is needed.

8.2. Status Report Cycle

Dashboard status reports shall be submitted as required, typically once every three weeks, per PM 686 A and 686 B syllabus (Appendix X).

8.3. Requirements Traceability Matrix

Requirements traceability matrix is in Appendix VI.

8.4. Method for Measuring Project Progress

The following tools will be used to measure project progress:

- Project Status Report Dashboard
- Schedule update submittals
- WBS update submittals
- Requirements Traceability Matrix

8.5. Subsidiary Plans for 3 Knowledge Areas

Refer to Appendix XI, Application & Performance of 3 Knowledge Areas (PM 686A PPM Deliverables) for application details.

Refer to Appendix XII, Application & Performance of 3 Knowledge Areas (PM 686B PPM Deliverables) for application details.

9. Change Management Plan

The Change Management process is the responsibility of the project manager to ensure that all of the work and only the work described in the WBS is performed and the deliverables are generated for each WBS element. This process will offer means to control changes from the project's premises and Project Management Plan. Changes will be documented, evaluated and communicated to the entire team. By early notification of probable change, the project team can exercise informed decision-making to maintain maximum project value.

It is important to evaluate the impact of change on cost, schedule, personnel issues, and legal requirements. To monitor change, it is imperative that the integrity of the approved Project Plan is maintained. Only then, may changes to the Project Plan be evaluated and documented throughout the Project Life Cycle.

The steps in the change management process include:

- Recognizing the change request

- Evaluating the change request
- Approving/rejecting the change request

9.1. Change Management Process

The Change Management process establishes an orderly and effective procedure for tracking the submission, coordination, review, evaluation, categorization, and approval for release of all changes to the project's baselines.

Change Request Process Flow Requirements

Step	Description
Generate CR	A submitter completes a CR Form and sends the completed form to the Project Manager
Log CR Status	The Project Manager enters the CR into the CR Log. The CR's status is updated throughout the CR process as needed
Evaluate CR	Project personnel review the CR and provide an estimated level of effort to process, and develop a proposed solution for the suggested change
Authorize	Approval to move forward with incorporating the suggested change into the project
Implement	If approved, make the necessary adjustments to carry out the requested change and communicate CR status to the submitter and other stakeholders

Table11. Change Request Process Flow

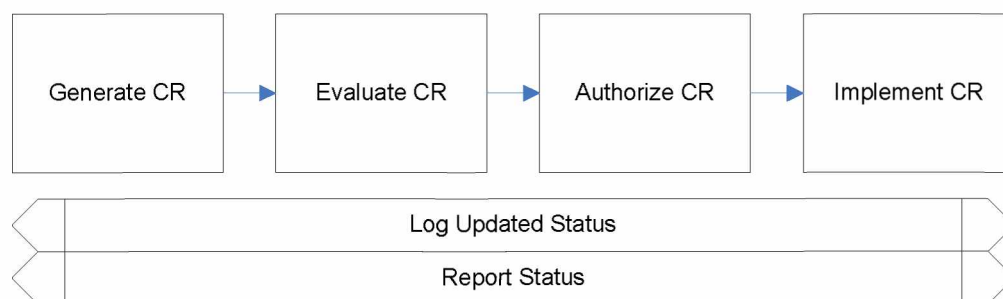


Figure4. Change Management Process Flow

Change Request Form and Change Management Log

Element	Description
Date	The date the CR was created
CR#	Assigned by the Project Manager
Title	A brief description of the change request

Description	Description of the desired change, the impact, or benefits of a change should also be described
Submitter	Name of the person completing the CR Form and who can answer questions regarding the suggested change
Priority	A code that provides a recommended categorization of the urgency of the requested change (High, Medium, Low)

Table12. Change Request Form

Change Log							
Project:						Date:	
Change No.	Change Type	Description of Change	Requestor	Date Submitted	Date Approved	Status	Comments
Each change request is assigned a reference number	This may be a design, scope, schedule or other type of change	The change request should be described in detail	Who initiated the change request	When was the request submitted	When was the request approved	Is the change request open, closed or pending? Has it been approved, denied or deferred	This section may describe why the change request was rejected, deferred or provide any other useful information

Table13. Change Log

Evaluating and Authorizing Change Request

Change requests are evaluated using the following priority criteria:

Priority	Description
High	Insert the definition the project assigns to a high priority CR/ Sponsor approval required
Medium	Insert the definition the project assigns to a medium priority CR/ PM authority to approve
Low	Insert the definition the project assigns to a low priority CR/ PM authority to approve

Table14. Change Request Priority Criteria

Change requests are evaluated and assigned one or more of the following change types:

Type	Description
Scope	Change affecting scope
Time	Change affecting time
Duration	Change affecting duration
Resources	Change affecting resources
Deliverables	Change affecting deliverables
Product	Change affecting product
Processes	Change affecting process
Quality	Change affecting quality

Table15. Change Request Types

Change requests are evaluated and assigned one of the following status types:

Status	Description
Open	Entered/Open but not yet approved or assigned
Work in Progress	CR approved, assigned, and work is progressing
In Review	CR work is completed and in final review prior to testing
Testing	CR work has been reviewed and is being tested
Closed	CR work is complete, has passed all tests, and updates have been released.

Table16. Change Request Status

Change Control Board

CHANGE CONTROL BOARD - DECISION				
Decision	<input type="checkbox"/> Approved	<input type="checkbox"/> Approved w/Conditions	<input type="checkbox"/> Rejected	<input type="checkbox"/> More Info
Decision Date				
Decision Explanation				
Stakeholder	Signature			Date
Project Sponsor				
Project Advisor				
Committee Member				
Committee Member				
Project Manager				

Table17. Change Control Board

10. Cost Management Plan

A cost management plan will not be included in this project management plan as there will be no costs or budget associated with researching and developing the Project Gate Self-Assurance Review Framework.

11. Human Resources Management Plan

A human resources management plan will not be included in the project management plan as there will be no resources associated with the research project other than the project manager.

12. Procurement Management Plan

A procurement management plan will not be included in the project management plan as there will be no procurement associated with the project.

13. Closeout Management Plan

The closeout management plan is in place in order:

To ensure proper completion of the project

To ensure project acceptance by Sponsor

To document and archive project documentation

To perform post-execution analysis and collect lessons learned.

Tasks are to be completed in the following order:

1. Final presentation
2. Complete closeout checklists
3. Extract and document Lessons Learned
4. Sponsor signs closeout form
5. Prepare and submit final project deliverables
6. Project Complete (Milestone).

Project Acceptance Checklist

Item	Question	Response
1	Did the project receive approval to close from both academic and organizational advisors?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2	Did the product sufficiently meet the stated business goals and objectives?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Table18. Closeout Checklist

13.1. Lessons Learned

Lessons learned are the learning gained from the process of performing a project. Formally conducted lessons learned sessions are traditionally held during project close-out, near the completion of the project. However, lessons learned may be identified and documented at any point during the project's life cycle. The purpose of documenting lessons learned is to share and use knowledge derived from experience to:

- Promote the recurrence of desirable outcomes
- Preclude the recurrence of undesirable outcomes

As a practice, lessons learned includes the processes necessary for identification, documentation, validation, and dissemination of lessons learned. Utilization and incorporation of those processes includes identification of applicable lessons learned, documentation of lessons learned, archiving lessons learned, distribution to appropriate personnel, identification of actions that will be taken as a result of the lesson learned, and follow-up to ensure that appropriate actions were taken.

Lessons learned should draw on both positive experiences— good ideas that improve project efficiency, and negative experiences— lessons learned only after an undesirable outcome has already occurred. Every documented lesson learned should contain at least these general elements:

- Project information and contact information for additional detail
- A clear statement of the lesson
- A background summary of how the lesson was learned
- Benefits of using the lesson and suggestion how the lesson may be used in the future

Lessons learned will be documented throughout development of PM 686A and PM 686B courses. A separate 2-3 page summary narrative of project lessons learned will be submitted for each course upon completion.

14. Document Control

Version	Release Date	Description [list of change, reason for change, & editor's name]
A.	3/10/15	Draft plan created and submitted for review
B.	3/16/15	CR#1 incorporated

C.	3/26/15	Incorporated additional committee comments
1.	4/08/15	Issued for use
2.	9/01/15	Updated risk register
3.	9/12/15	Updated for PM686B PMP#1
4.	10/1/15	Updated with Signed Student/Advisory Committee "Contract" for PM 686B
5.	10/6/15	Updated abstract
6.	10/8/15	Updated for PM686B PMP#2
7.	11/6/15	Updated for PM686B PMP#3
8.	11/20/15	Updated for PM686B PMP#3
9.	11/30/15	Updated for PM686B Final Deliverables

Table19. Project Plan Change History

15. Appendices

i. Abstract

Major Alaska oil and gas capital projects can fail or have poor outcomes, including significant cost and schedule overruns if the projects are not ready to proceed into subsequent project stages. A comprehensive project gate assurance review ensures their readiness for the next project gate. Internal Subject Matter Experts (SMEs) should be leveraged in the review process to determine whether all design, construction, commissioning, and operational issues have been formally and properly addressed by the project team.

A new project gate Self-Assurance Review Framework (SARF) applicable to major Alaskan oil and gas companies to improve project delivery is proposed in this product-related paper. Given the current economic climate, there is a merit in using internal project gate self-assurance, which is premised to be more time and cost efficient. This can be accomplished by using an Alaskan local internal assurance review team rather than a corporate external travel team of reviewers. The assurance protocol is a “cold eyes” review with SMEs at the main approval gates to ensure the project team has considered all aspects of project readiness. This is to assure the project will be successfully and safely executed on budget, on schedule, and within scope.

While external consultants are available to conduct such reviews, this process is designed as an internal local assurance review process in order to generate a beneficial improvement cycle employing internal local SMEs who are accustomed and familiar with the execution of Arctic projects. They are familiar with prior project successes and failures. There are both cost and quality efficiencies to be realized with this approach by leveraging local expertise rather than external reviewers.

This paper includes a literature review of assurance review practices, followed by a summary and analysis of interviews conducted with local Alaskan project professionals. These professionals are experienced with major projects delivery and were personally interviewed using guidelines written for this project.

Key Words:

Assurance Review Process
Assurance Review Framework
Funding Gates Approval
Gate reviews
Project Go/ No-Go Decision

ii. Project Charter

PROJECT INFORMATION			
		DATE PREPARED:	01/25/2015
PROJECT NAME:	Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects	DATE MODIFIED:	09/14/2015
PROJECT SPONSOR:	Mark McClellan	PHONE:	265-1052
PROJECT MANAGER:	Anca Bertus	PHONE:	263-4152
SCHEDULED START DATE:	02/01/2015	SCHEDULED COMPLETION DATE:	12/08/2015

PROJECT OVERVIEW
<p>Major capital projects can fail or have poor outcomes including significant cost and schedule overruns if the projects have not been through a comprehensive project approval gate assurance review. Subject Matter Experts (SMEs) must be levered in a manner wherein all design, construction, commissioning, and operational issues (including external factors such as extreme weather conditions) have been formally and properly addressed. Given the current economic climate, a more time and cost efficient local assurance review framework would increase value derived from local assurance reviews.</p> <p>This project will create a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with SMEs at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope. While external consultants are available to conduct such reviews, this process will be primarily designed as an internal local assurance review process in order to generate a good improvement cycle employing internal local SMEs who are accustomed to and familiar with the execution of arctic projects, and familiar with prior project successes and failures. There are both cost</p>

efficiencies to be gained with this approach and leveraging local expertise actually provides better quality in the process.

The project will include a literature review of assurance review processes followed by an analysis of the interviews conducted with local Alaskan project professionals experienced with major projects delivery using interview guidelines written for this project.

The project is phased to follow University of Alaska Anchorage (UAA) Master of Science in Project Management (MSPM) Capstone class durations as listed:

- PM 686A Initiating and Planning (January 16, 2014 thru April 29, 2014)
- PM 686B Executing, Controlling, and Closing (September 04, 2014 thru December 07, 2014).

Contents of each class are listed:

PM 686A Initiating and Planning

- Stakeholder Identification and Analysis
- Project Charter
- Preliminary project schedule/ Gantt chart with updates
- Preliminary Work Breakdown Structure (WBS) with updates
- 200 word Project Abstract with updates
- Letter of support from project sponsor
- Preliminary Graduate Studies Plan (GSP) (including written agreement from advisor/ committee members)
- Selection of 3-4 Knowledge Areas used during project to demonstrate mastery, how they will be applied to the project and how the performance will be measured. (with update)
- Project scope statement
- Requirements documentation (stakeholder requirements)
- Tables of contents for PM Plan and Final Project Report
- Research Sources and Key Words
- Preliminary research methods and approach to analysis (e.g., surveys, interview questions, statistical analysis, etc.)
- Description of expected research methods, results and approach for analysis
- Signed Student/ Advisory Committee “contract”
- Written draft of project management plan with updates

- Description of expected project deliverables and outcomes (with updates)
- Advisor- approved research instruments and analysis methodology. Approval must be documented in email.
- University of Alaska Anchorage (UAA) IRB submittal
- Professional draft presentation of project objectives, charter, project management plan description of project deliverables
- Presentation of approved Project Plan. PowerPoint/other media. (with updates)
- Oral Presentation
- Separate 2-3 page summary narrative of project lessons learned.
- Separate 2-3 page descriptive narrative of how focused knowledge areas were applied and measured on project.

PM 686B Executing, Controlling, Closing

- Change Control Process, Project progress method and status (e.g. EVM, other)
- Project Management Plan updates (using change control process)
- Updates on requirements traceability matrix
- Updates on WBS
- Updates on schedule/Gantt chart
- Updates on risk register
- Risk response implementation
- Project deliverables status update
- Data collection/research updates (should have all raw data at this point)
- 3-4 Knowledge Areas processes applied and measured during project to demonstrate mastery (with updates)
- Final signed GSP directly to PM Department Staff
- Signed Student/Advisory Committee “contract”
- Updates on abstract
- Updates on table of contents
- Updates on research sources and key words
- Research results with validated research analysis (needs advisor approval)
- Preliminary conclusions and project deliverables
- Draft presentation
- Complete and properly formatted project report and final project deliverables (with updates)
- Oral Presentation
- Final report, to include two hard copies of complete report, appendices, mandatory

<p>deliverables and PowerPoint presentation. One copy will be placed in tabbed binder provided by the Department for MSPM library with a CD of complete copy of electronic files.</p> <ul style="list-style-type: none"> • 2-3 page summary narrative of project lessons learned included in separate section of project binder. • Narrative on 3-4 Knowledge Areas processes applied and measured during project to demonstrate mastery. Performance measured and lessons learned.

PROJECT OBJECTIVES	
OBJECTIVE	CRITERIA FOR EVALUATION
Create a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery	Approval by advisory committee and sponsor

PROJECT SCOPE	
IN SCOPE	OUT OF SCOPE
Analyze current assurance review processes	Suggestions to enhance companies corporate assurance review processes
Define questionnaire for Alaska SMEs that have been thru assurance reviews	Review assurance process outside of Oil & Gas Industry
Conduct interviews	Conduct interviews outside oil and gas industry
Compile and evaluate interview results	
Develop a standard procedure for the self-assurance process for Alaska Major Oil & Gas projects	Implementation of the self-assurance process in Alaska O&G companies

PROJECT DELIVERABLES
Written report
Self-assurance process framework
Final briefing report

MAJOR MILESTONES	
MILESTONE/ DELIVERABLE	TARGET DATE
PM 686A Initiating and Planning (January 16, 2014 thru April 29, 2014)	
Sponsor Letter Signed	January 27, 2015
Advisory Committee Selected and Approved	January 27, 2015
Submit PPM#1	January 30, 2015
Submit PPM#2	February 20, 2015
Submit PPM#3	March 13, 2015
Go Decision #1	March 18, 2015
IRB Submittal	March 27, 2015
Submit PPM#4	April 10, 2015
IRB Approval	April 10, 2015
Go Decision #2	April 15, 2015
Final Oral Presentation	April 20, 2015
Final Project Deliverables	April 27, 2015
PM 686B Executing, Controlling, and Closing (September 04, 2015 thru December 09, 2015)	

Submit PPM#1	<u>September 18, 2015</u>
Submit PPM#2	<u>October 9, 2015</u>
Submit PPM#3	<u>November 6, 2015</u>
Go Decision #1	<u>October 14, 2015</u>
Submit PPM#4	<u>November 20, 2015</u>
Go Decision #2	<u>November 25, 2015</u>
Final Oral Presentation	<u>November 30, 2015</u>
Final Project Deliverables	<u>December 9, 2015</u>

ASSUMPTIONS

- Project Manager has access to necessary software programs (Microsoft Office, WBS Chart Pro, Blackboard, Google Docs, etc.).
- Advisors will review and give constructive feedback on draft project deliverables.
- This project assumes the SMEs are receptive and willing to participate in the interview process.
- Project Stakeholders have adequate time to review and approve project deliverables.

CONSTRAINTS

- Project Progress Milestone (PPM) dates as specified in 686A and 686B syllabi (see attached)
- Advisor and committee members time availability
- SMEs time availability and buy in the new process.

PROJECT RISKS				
RISKS	IMPACT	MITIGATION STRATEGY	CRITICALITY	PROBAB ILITY
1. Project Manager time availability	Can cause class repeat/ project failure	<ul style="list-style-type: none"> Dedicate time to complete PPM deliverables. 	Severe	50%
2. SME participation	Can cause project failure	<ul style="list-style-type: none"> Coordinate with local Alaskan project professionals to acquire support. 	Severe	50%
3. Adequate interview questions	Can cause additional project work thru IRB process	<ul style="list-style-type: none"> Generate questions with qualified SMEs Coordinate with committee advisors 	Medium	30%
4. Critical Resources	Can cause project delays	<ul style="list-style-type: none"> Review project schedule with committee team to acquire approval Generate Student/Advisory Committee Contract 	Medium	30%
5. Acquire Project Management Software	Can cause project delays	<ul style="list-style-type: none"> Download student version thru the University 	Medium	10%

KEY STAKEHOLDERS

PROJECT SPONSORS (SEE ROLES & RESPONSIBILITIES BELOW)
--

MM Project Engineering Manager

PROJECT MANAGEMENT (SEE ROLES & RESPONSIBILITIES BELOW)
--

Anca Bertus Project Manager

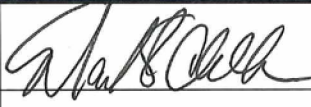
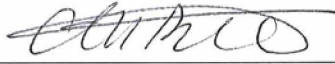
TEAM (SEE ROLES & RESPONSIBILITIES BELOW)
--

Roger Hull Primary Advisor

Steve Hatter Committee Member

William Spindle Committee Member

ROLES & RESPONSIBILITIES		
ROLES	RESPONSIBILITIES	CONTACT PERSON
PROJECT SPONSOR	<ul style="list-style-type: none"> • Authorize & approve project • Approve project deliverables • Authorize project resources • Resolve issues 	MM
PROJECT MANAGER	<ul style="list-style-type: none"> • Coordinate team activities • Project planning • Monitor project progress • Resolve issues • Report project progress to the Project Sponsor • Communicate issues to the Project Sponsors for resolution 	Anca Bertus
IRB	<ul style="list-style-type: none"> • Approval for survey questionnaire & interview 	UAA IRB Department
TEAM	<ul style="list-style-type: none"> • Serve as technical experts and share knowledge • Participate in team meetings & discussions • Learn from other technical experts on the team to gain an understanding of the system • Apply technical expertise and judgment in the development of & completion of project deliverables • Resolve Issues. 	SMEs Project teams Advisory Committee Roger Hull Bill Spindle Steve Hatter

PROJECT AUTHORITY			
APPROVER NAME	TITLE	SIGNATURE	DATE
Mark McClellan	Project Engineering Manager (Sponsor)		1/29/15
Roger Hull	Project Advisor		
Anca Bertus	Project Manager		1/28/15

iii. **Sponsor Letter**

January 27, 2015

University of Alaska Anchorage
Project Management Department
University Center, Room 155
3901 Old Seward Highway
Anchorage, AK 99503

Attn: Mr. Roger Hull

Re: Support letter for Anca Bertus' PM686A Final Project

Dear Mr. Hull:

The purpose of this letter is to convey my support for Anca Bertus' PM 686A final project: "Self-Assurance Review Process for Alaska Capital Projects within \$50 – 150 Millions Total Installed Cost."

The self-assurance process will assess the readiness for gate approval for projects ranging from \$50 – 150 Millions with the aim for a consistent quality and approach. This process will ensure a project is on track to deliver or will recommend a project to be re-scoped.

This project is part of our business goals for this year and we look forward to a new fully compliant self-assurance review process fit for purpose for our routine type projects within the Alaska Business Unit.

If you need any additional information, please contact me regarding Anca's final project.

Sincerely,



Mark McClellan
Project Engineering Manager
ConocoPhillips Alaska Inc.
700 G Street
Anchorage, AK 99501
(907) 265-1052 - Office
Mark.A.McClellan@ConocoPhillips.com

i. Signed Student/Advisory Committee "Contract" for PM 686A and 686B

Expectations for PM 686A and 686B Capstone Project Advising

Student Name: Anca Bertus

PM 686A

Semester: Spring 2015

Area of Responsibility	Student	Primary Advisor (1 person)	Committee Members (2 people)	Instructor of Record (IOR) and Admin Staff
Project Management	PRIMARY OWNER	Coaching, feedback and assessment	Coaching, feedback and assessment input	
Communication and Stakeholder Management	<ul style="list-style-type: none"> • Clear description of project • Proactive selection of Advisor and Committee members • Demonstrate effective communication and stakeholder management by determining and coordinating necessary and agreed modes and setting expectations for timing, and emphasis or tailoring of feedback and communication across with PA and committee (and other stakeholders) • Provide regular status reports as agreed with PA and committee • Identify and resolve communication issues • Identify, balance and resolve 	<ul style="list-style-type: none"> • Email confirmation of agreement to serve • Availability as agreed 	<ul style="list-style-type: none"> • Email confirmation of agreement to serve • Availability as agreed 	<ul style="list-style-type: none"> • Faculty specialties matrix • Session Lectures • Syllabus • Blackboard materials • Announcements • AV set up • Final presentation schedule and logistics • Student and committee support as requested • Adjunct Faculty appointment letters • Escalation path

	<ul style="list-style-type: none"> contradictory inputs Discuss and get signatures for "Expectations" from student, advisor and committee members and submit to PM office. 			
Project Deliverables	<ul style="list-style-type: none"> Complete work per syllabus Incorporate feedback from PA, committee and stakeholders 			
Feedback	<ul style="list-style-type: none"> Determine type, timing and format of feedback from PA and committee Solicit, coordinate and integrate feedback from stakeholders, PA and committee for PPMs and final project deliverables Identify, balance and resolve contradictory inputs 	Provide agreed feedback on timely basis	Provide agreed feedback on timely basis	
Final Presentation	<ul style="list-style-type: none"> Prepare Present 	<ul style="list-style-type: none"> Attend Provide Feedback 	<ul style="list-style-type: none"> Attend Provide Feedback 	<ul style="list-style-type: none"> Coordinate schedule and logistics
Assessment and Grading		<ul style="list-style-type: none"> Coordinate input from committee for 4 PPMs and final 	Provide input to primary advisor for: 4 PPMs Final deliverables	<ul style="list-style-type: none"> Input 4 PPMs and final deliverables scores to Blackboard

		project deliverables <ul style="list-style-type: none"> • Assignment of PPM scores • Provide scores to IOR • Go/No checkpoint recommendation • Assign final grade 	Go/No checkpoints	<ul style="list-style-type: none"> • Ensure consistency across students • Communicate go/no-go decisions to students • Input final grade to UA Online
Administrative Documents	<ul style="list-style-type: none"> • GSP preparation and submission to PM Office • Signed Expectations agreement • IRB submittal (686A) • Apply for graduation (686B) • RSVP for Hooding and commencement (686B) 			<ul style="list-style-type: none"> • Graduate Studies Plan (GSP signatures and processing) • Include signed "Expectations" form in student file. • DF paperwork and annual progress report for students • Graduation Audit • Graduation Requirement Report (GRR) • Archive final project deliverables

Student is responsible for obtaining the following signatures and submitting completed form to PM office to include in student file.

I understand and agree to the expectations described above:

Student Signature: [Signature] Date: 2/13/15

Advisor Signature: [Signature] Date: 2/13/2015

Committee Member: [Signature] Date: 2/13/15

Committee Member: Bill Spidle Date: 2/16/15

Expectations for PM 686A and 686B Capstone Project Advising

Student Name: Anca Bertus

PM 6896B

Semester: Fall 2015



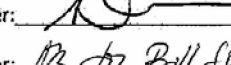
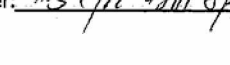
Area of Responsibility	Student	Primary Advisor (1 person)	Committee Members (2 people)	Instructor of Record (IOR) and Admin Staff
Project Management	PRIMARY OWNER	Coaching, feedback and assessment	Coaching, feedback and assessment input	
Communication and Stakeholder Management	<ul style="list-style-type: none"> • Clear description of project • Proactive selection of Advisor and Committee members • Demonstrate effective communication and stakeholder management by determining and coordinating necessary and agreed modes and setting expectations for timing, and emphasis or tailoring of feedback and communication across with PA and committee (and other stakeholders) • Provide regular status reports as agreed with PA and committee • Identify and resolve communication issues • Identify, balance and resolve 	<ul style="list-style-type: none"> • Email confirmation of agreement to serve • Availability as agreed 	<ul style="list-style-type: none"> • Email confirmation of agreement to serve • Availability as agreed 	<ul style="list-style-type: none"> • Faculty specialties matrix • Session Lectures • Syllabus • Blackboard materials • Announcements • AV set up • Final presentation schedule and logistics • Student and committee support as requested • Adjunct Faculty appointment letters • Escalation path

	<ul style="list-style-type: none"> contradictory inputs Discuss and get signatures for "Expectations" from student, advisor and committee members and submit to PM office. 			
Project Deliverables	<ul style="list-style-type: none"> Complete work per syllabus Incorporate feedback from PA, committee and stakeholders 			
Feedback	<ul style="list-style-type: none"> Determine type, timing and format of feedback from PA and committee Solicit, coordinate and integrate feedback from stakeholders, PA and committee for PPMs and final project deliverables Identify, balance and resolve contradictory inputs 	Provide agreed feedback on timely basis	Provide agreed feedback on timely basis	
Final Presentation	<ul style="list-style-type: none"> Prepare Present 	<ul style="list-style-type: none"> Attend Provide Feedback 	<ul style="list-style-type: none"> Attend Provide Feedback 	<ul style="list-style-type: none"> Coordinate schedule and logistics
Assessment and Grading		<ul style="list-style-type: none"> Coordinate input from committee for 4 PPMs and final 	Provide input to primary advisor for: 4 PPMs Final deliverables	<ul style="list-style-type: none"> Input 4 PPMs and final deliverables scores to Blackboard

		project deliverables <ul style="list-style-type: none"> • Assignment of PPM scores • Provide scores to IOR • Go/No checkpoint recommendation • Assign final grade 	Go/No checkpoints	<ul style="list-style-type: none"> • Ensure consistency across students • Communicate go/no-go decisions to students • Input final grade to UA Online
Administrative Documents	<ul style="list-style-type: none"> • GSP preparation and submission to PM Office • Signed Expectations agreement • IRB submittal (686A) • Apply for graduation (686B) • RSVP for Hooding and commencement (686B) 			<ul style="list-style-type: none"> • Graduate Studies Plan (GSP signatures and processing) • Include signed "Expectations" form in student file. • DF paperwork and annual progress report for students • Graduation Audit • Graduation Requirement Report (GRR) • Archive final project deliverables

Student is responsible for obtaining the following signatures and submitting completed form to PM office to include in student file.

I understand and agree to the expectations described above:

Student Signature:  Date: 9/15/15
 Advisor Signature:  Date: 9/15/2015
 Committee Member:  Date: 9/15/15
 Committee Member:  Date: 9/15/15

ii. Research Sources and Key Words

Introduction

This document contains the preliminary sources and key words for the research.

Research Sources

Literature research sources will comprise of existing assurance review procedures to gain understanding of background and current approach. Literature research will focus on review cycle and review methodologies.

Interviews will be done with local Alaskan project professionals experienced with major projects delivery to provide their view points and recommendations for the new self-assurance framework. The interviewees are a mixture of planners, advisors, project leads, managers, and team leads. The interviews will be documented via meeting minutes email to verify notes taken through interview process were captured correctly.

Key Words

1. Assurance Review Process
2. Stage Gated Project Development Process
3. Gate Review Process
4. Funding Cycle Review
5. Funding Gates Approval
6. Capital Projects Value Assurance
7. Define and Execute gate reviews
8. Execution Assurance
9. Project Health Check
10. Project Go/ No-Go Decision
11. Project Scorecard.

iii. Expected Research Methods, Results, and Approach to Analysis

Introduction

This document contains the research methods and approach to analysis.

Research Methods

The research methods employed in this project will consist of literature review and interviews with structured guidelines.

Literature Review

Literature research sources will comprise the project gate assurance review procedures to gain understanding of background and current approach. Literature research will focus on review cycle and review methodologies.

Interviews

Interviews will be done with local Alaskan project professionals experienced with major projects delivery to provide their view points and recommendations for the new self-assurance framework. The interviewees are a mixture of planners, advisors, project leads, managers, and team leads. The interviews will be documented via meeting minutes email to verify notes taken through interview process were captured correctly.

Approach to Analysis

The data collected from literature review and interviews will be used to determine the criteria required to perform self-assurance reviews for major capital projects over \$50 Million Total Installed Cost.

iv. Expected Project Deliverables and Outcomes

Introduction

This document contains a description of expected project deliverables and outcomes.

Expected Project Deliverables

The research methods, results, and approach as specified in Project Management Plan Appendix will provide the foundation to determine the criteria required to perform self-assurance reviews in Alaska for major oil and gas projects.

More detail will be added upon interview results.

Expected Project Outcomes

Expected project outcomes are as listed:

- Completion of new fully compliant self-assurance process framework using internal resources that is applicable to Alaska major oil and gas projects.
- Utilization of future project funding more effectively and efficiently.

v. Advisor-Approved Research Instruments and Analysis Methodology

From: [Roger K Hull](#)
To: [Bertus, Anca R](#)
Subject: [EXTERNAL]RE: Regarding updated PM686A documents and your approval request for Research Methods and Analysis
Date: Wednesday, March 18, 2015 3:25:50 PM

Anca,

Your revised PM686A Research Methods and Analysis Approach are approved.

Regards,

Roger

Roger K. Hull, PMP, CISM, CRISC
Instructor, PM Dept
UAA
rk Hull@uaa.alaska.edu
[907-786-1923](tel:907-786-1923) (office)
[907-346-6280](tel:907-346-6280) (cell)

From: Bertus, Anca R [mailto:Anca.R.Bertus@conocophillips.com]
Sent: Wednesday, March 18, 2015 7:55 AM
To: Roger K Hull
Subject: Regarding updated PM686A documents and your approval request for Research Methods and Analysis

Roger –

Per our meeting review yesterday, I have incorporated all comments in the documents discussed. Attached you will find my updated PM686A Research Methods and Analysis, Abstract, and IRB documents.

Please reply to this email with your approval for the research methods and analysis for my project.

Regards,

Anca Bertus
Project Lead, PMP
ConocoPhillips Inc.
700 G Street
Anchorage, AK 99501
(907) 263-4152 - Office
(907) 230-4837 - Mobile

vi. Project Requirements (Traceability Matrix) Documentation

Requirements Traceability Matrix								
Functional Area	Functional Requirement	WBS ID	Specific Requirements	Primary Stakeholder for Acceptance	Responsible	Verification	Validated By	Date
Project Management	Project Management Plan	1.2.1	Abstract	Sponsor	PM	Abstract has been reviewed and approved	ARB	1/16/15
		1.1.3.1	Sponsor Letter	Sponsor	PM	Signed Sponsor letter received	ARB	1/27/15
		1.2.3	Project Charter	Sponsor & Advisor	PM	Project charter has been reviewed and approved	ARB	1/22/15
		1.2.2	Stakeholder Identification & Analysis	Advisory Committee	PM	Stakeholders have been identified and needs analyzed	ARB	1/20/15
		1.2.7	Select 3 Knowledge areas selection	Advisory Committee	PM	3 Knowledge areas have been selected	ARB	1/26/15
		1.3.1	Scope Statement	Advisory Committee	PM	Scope statement has been created and describes the assumptions, constraints, and risks.	ARB	2/20/15

Functional Area	Functional Requirement	WBS ID	Specific Requirements	Primary Stakeholder for Acceptance	Responsible	Verification	Validated By	Date
		1.2.4	Project Schedule	Advisory Committee	PM	Project schedule is complete and shows all work involved	Continuous	
		1.2.5	WBS	Advisory Committee	PM	WBS has been created and shows % of task completed	Continuous	
		1.4.1	Project Management Plan	Advisory Committee	PM	Project Management Plan will contain all management plans necessary to execute the project on time	ARB	4/8/15
	IRB Submittal	1.2.4.1	Research Approach & Methods	Advisory Committee	PM	Preliminary research approach and methods have been documented	ARB	3/27/15
		1.2.4.1.2	Research Resources & Key Words	Advisory Committee	PM	Research resources and key words have been documented	ARB	3/27/15
Final Report			Formatted Final Report with Assurance Procedure	Sponsor & Advisory Committee	PM	>20 pages long, formatted according to PMI Global Congress standards	ARB	11/20/15

<u>Functional Area</u>	<u>Functional Requirement</u>	<u>WBS ID</u>	<u>Specific Requirements</u>	<u>Primary Stakeholder for Acceptance</u>	<u>Responsible</u>	<u>Verification</u>	<u>Validated By</u>	<u>Date</u>
Oral Defense	Power Point	1.5.3	Power point Slides	Advisory Committee	PM	PM 686A presentation to be created and will describe Project Management Plan	ARB	4/8/15
	Presentation	1.6.3	Present (30 min)	Advisory Committee	PM	PM 686A presentation to be created and will describe Project Management Plan	ARB	4/20/15
	Power Point	2.5.4	Power point Slides	Advisory Committee	PM	PM 686B presentation to be created and will describe Project Management Plan & Final Report	ARB	11/20/15
	Presentation	2.6.3	Present (30 min)	Advisory Committee	PM	PM 686B presentation to be created and will describe Project Management Plan & Final Report	ARB	11/30/15

vii. Consent Form

CONSENT FORM

PRINCIPAL INVESTIGATOR:

Anca Bertus, PMP, MSPM Student
University of Alaska Anchorage
(907) 230-4837

FACULTY ADVISOR:

Roger Hull, PMP
University of Alaska Anchorage
(907) 786-1923

DESCRIPTION:

I am interested in developing a new project gate self-assurance review framework applicable to major Alaska Oil and Gas owner companies' projects to improve delivery confidence. The assurance process assures that the project will safely deliver the premised scope within the budget and schedule estimated. This assurance framework will be a "cold-eyes" review with in-house Subject Matter Experts (SMEs) at the Define and Execute approval gate to ensure the project team has considered all aspects of project readiness.

You have been identified as an Alaskan project professional experienced with major projects delivery. This research study will involve a structured interview with you lasting approximately 30 minutes.

VOLUNTARY NATURE OF PARTICIPATION:

Your participation in this study is voluntary. If you do not wish to participate, or would like to end your participation in this study, there will be no penalty or loss of benefits to you to which you are otherwise entitled. In other words, you are free to make your own choice about being in this study or not, and may quit at any time without penalty.

CONFIDENTIALITY:

Your name will not be attached to your interview responses. Your name and any other identifiers will be kept in a locked password protected file that is only accessible to me. Any information from this study that is published will not identify you by name. I will store the data for three years after project completion. After this date, all data will be destroyed.

BENEFITS:

Although there will be no direct benefit to you from participating in this study, others may benefit because I am aiming to streamline an effective project gate assurance review process.

RISKS:

There are no known risks to you. There may be some minimal risk of discomfort from your participation in this research because I will be asking you about past project

experiences, both the positive ones and the negative ones. These risks are being minimized by keeping all information confidential and specific names extracted. If you feel uncomfortable at any time, you may choose to skip a question or stop the interview.

CONTACT PEOPLE:

If you have any questions about this research, please contact Anca Bertus or Advisor Roger Hull at the phone numbers listed above.

If you have questions about your rights as a research participant, or wish to obtain information, ask questions or discuss any concerns about this study with someone other the researcher(s), please contact the:

University of Alaska Anchorage
UAA Research Integrity & Compliance
Sharilyn Mumaw
Phone: (907) 786-1099
Email: simumaw@uaa.alaska.edu.

SIGNATURE:

Your signature on this consent form indicates that you fully understand the above study, what is being asked of you in this study, and that you are signing this voluntarily. If you have any questions about this study, please feel free to ask them now or at any time throughout the study.

Signature _____

Date _____

Printed Name _____

A copy of this consent form is attached for you to keep.

viii. Interview Protocol

Date of Interview:

Participant:

Other Discussion:

References Discussed:

Additional Comments:

Introduction

You have been selected as a Subject Matter Expert to provide input for the Capstone Project I am currently documenting to satisfy requirements for courses at University of Alaska Anchorage. You have returned to me the consent form for this research, and I thank you for your willingness to share your expertise related to this research effort.

I plan to honor your time by managing this interview within the time allocated. In order to do so, I may at certain points have to cut our conversation short to move on to the remaining questions.

The project is focused on the following Problem Statement, which I also supplied to you in advance.

Major capital projects can fail or have poor outcomes including significant cost and schedule overruns if the projects have not been through a comprehensive project approval gate assurance review. Subject Matter Experts (SMEs) must be leveraged in a manner wherein all design, construction, commissioning, and operational issues (including external factors such as extreme weather conditions) have been formally and properly addressed. Given the current economic climate, a more time and cost efficient self-assurance review framework could accomplish all gate assurance goals while keeping costs down.

Research is being conducted to gather knowledge and best practices and to support the development of a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery.

Individual history

1. What worked especially well during project gate assurance reviews that you have been involved? Have you been through any particularly effective assurance reviews? What made the review effective?
2. On what topics did you spend most of the review time? Why?

3. What were the project benefits or key findings from the assurance review?
4. What did not work well during the reviews? Why? What are the most significant pain points with respect to the way the assurance reviews are currently done? Was it necessary pain or is there an easier way to assure the project?

Assurance review suggestions

5. What are your key suggestions for the assurance procedure?
6. Who needs to participate in a project assurance review?
7. What are necessary elements of a good assurance review? How should you structure the review? What is the right structure for an efficient assurance?
8. For an efficient assurance, what kind of pre-work is necessary to be completed by the project team? How much pre-work is expected from the review team?

9. What kind of follow-up work is necessary after the assurance review is completed?
10. With whom should the assurance review results be shared? For example: Assurance review team, project team, funding approvers.
11. What are some outcomes of the review that you foresee?
12. How should the entire process be documented? What collaborative tools and techniques work best to achieve a successful assurance?
13. Did you proactively capture lessons learned during and after the assurance review process? If so, how was that done?

ix. IRB Approval Documentation



Research &
Graduate Studies
UNIVERSITY of ALASKA ANCHORAGE

3211 Providence Drive
Anchorage, Alaska 99508-4614
T 907.786.1099, F 907.786.1791
www.uaa.alaska.edu/research/ric

DATE: April 3, 2015

TO: Anca Bertus, Bachelor of Science Petroleum Engineering
FROM: University of Alaska Anchorage IRB

PROJECT TITLE: [737945-1] Project Gate Self-Assurance Review Framework for Major Alaska
Oil and Gas Projects

SUBMISSION TYPE: New Project

ACTION: DETERMINATION OF NOT HUMAN SUBJECTS RESEARCH

DECISION DATE: April 3, 2015

Thank you for your submission of New Project materials for this research study. The University of Alaska Anchorage IRB has determined this project does not meet the definition of human subject research under the purview of the IRB according to federal regulations.

We will retain a copy of this correspondence within our records.

If you have any questions, please contact Sharilyn Mumaw at (907) 786-1099 or simumaw@uaa.alaska.edu. Please include your project title and reference number in all correspondence with this office.

A handwritten signature in dark ink, appearing to read 'Sharilyn Mumaw'.

Sharilyn Mumaw, M.P.A.

Research Integrity & Compliance Officer

x. Status Reports

One Page PM 686A Project Status Report Dashboard 1

Name: Anca Bertus

Date: 2/6/2015

Project Title: Self-Assurance Review Process for Alaska Capital Projects within \$50 - 150 Million Total Installed Cost

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new fully compliant self-assurance process fit for purpose and applied to Alaska repetitive type projects in the range of \$50 – 150 Million, total installed cost. This self-assurance process will satisfy the corporate assurance review requirements and will still be a “cold-eyes” review with Subject Matter Experts (SMEs) from Alaska BU or a sister BU, e.g. Canada.</i></p>				<p><i>Key tasks completed:</i></p> <p><i>Received sponsorship for the project</i></p> <p><i>Established an advisory committee and held brief discussion with each member</i></p> <p><i>Submitted all PPM#1 deliverables on due date</i></p> <p><i>IRB account created</i></p> <p><i>Updated schedule</i></p> <p><i>Held discussion with legal group regarding project</i></p> <p><i>Key tasks started:</i></p> <p><i>Scope statement</i></p>
Current Status			X	Forecast
<p><i>On track, 9% complete.</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<p><i>Time is the main constraint t as I have to do better to ensure that I get my deliverables done on time and provide ample time to the committee for their input.</i></p>				<p><i>I will schedule meetings with the committee and my internal team to discuss the survey questionnaires.</i></p>

One Page PM 686A Project Status Report Dashboard 2

Name: Anca Bertus

Date: 2/27/2015

Project Title: Self-Assurance Review Process for Alaska Capital Projects within \$50 - 150 Million Total Installed Cost

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new fully compliant self-assurance process fit for purpose and applied to Alaska repetitive type projects in the range of \$50 – 150 Million, total installed cost. This self-assurance process will satisfy the corporate assurance review requirements and will still be a “cold-eyes” review with Subject Matter Experts (SMEs) from Alaska BU or a sister BU, e.g. Canada.</i></p>				<p><i>Key tasks completed:</i> Received sponsorship for the project Held brief discussion with each committee member& sponsor regarding project progress Submitted all PPM#2 deliverables 2 days prior to due date IRB training completed Updated schedule& cost Held discussions with legal group regarding project</p> <p><i>Key tasks started:</i> PPM# 3 deliverables, mainly PMP</p>
Current Status			X	Forecast
<p><i>On track, 20% complete. SPI 1, CPI 1.17</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<p><i>Time is the main constraint t as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input. Survey questionnaire and interview questions are crucial to meet the March 27th IRB submission deadline.</i></p>				<p><i>I will schedule meetings with the committee and my internal team to discuss the survey questionnaires.</i></p>

One Page PM 686A Project Status Report Dashboard 3

Name: Anca Bertus

Date: 3/27/2015

Project Title: Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new project gate self-assurance framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with Subject Matter Experts at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope.</i></p>				<p><i>Key tasks completed:</i></p> <ul style="list-style-type: none"> Continued to have discussions with each committee member& sponsor regarding project progress and receive/ incorporate feedback into the deliverables Submitted all PPM#3 deliverables on time Held discussions with my company legal group regarding project and decided to do a project scope change and to not affiliate the project with my company – Change management was applied and received approval signatures from advisor and sponsor. Change Request #1 will be posted in PPM#4. Received email approval from main advisor regarding research methods and analysis Submitted IRB documentation for approval Updated schedule & cost <p><i>Key tasks started:</i></p> <ul style="list-style-type: none"> PPM# 4 deliverables and updating all deliverables to reflect the changed scope Draft Presentation sent to main advisor for review.
Current Status			X	Forecast
<p><i>On track, 55% complete. SPI 1, CPI 1.17</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<ul style="list-style-type: none"> <i>Time is the main constraint as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input.</i> 				<p><i>I will schedule meetings with the committee and my internal team to review presentation and final PM plan before PPM#4 is due.</i></p>

<ul style="list-style-type: none">• <i>Due to scope change done, I have to update all documents to reflect the current plan forward.</i>• <i>IRB approval is my main risk currently.</i>	
---	--

One Page PM 686B Project Status Report Dashboard #1

Name: Anca Bertus

Date: 9/3/2015

Project Title: Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new project gate self-assurance framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with Subject Matter Experts at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope.</i></p>				<p><i>Key tasks completed:</i></p> <ul style="list-style-type: none"> <i>Data collection (interviews and literature reviews)</i> <i>Updated schedule & cost & risks</i> <p><i>Key tasks started:</i></p> <ul style="list-style-type: none"> <i>Data analysis</i> <i>Deliverables for PPM#1</i>
Current Status			X	Forecast
<p><i>On track, 68% complete.</i></p> <p><i>SPI 1, CPI 1.17</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<ul style="list-style-type: none"> <i>No anticipated changes at this time.</i> <i>Due to current job situation, my Sponsor might not be able to continue in his current project role.</i> <i>Time is the main constraint as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input.</i> 				<p><i>I will schedule meetings with the committee and my internal team to review the data accumulated and PPM#1 deliverables.</i></p>

One Page PM 686B Project Status Report Dashboard #2

Name: Anca Bertus

Date: 9/24/2015

Project Title: Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new project gate self-assurance framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with Subject Matter Experts at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope.</i></p>				<p><i>Key tasks completed:</i></p> <ul style="list-style-type: none"> • Data collection (interviews and literature reviews) • Deliverables for PPM #1 <p><i>Key tasks started:</i></p> <ul style="list-style-type: none"> • Data analysis • Body for the final report • Deliverables for PPM#2
Current Status			X	Forecast
<p><i>On track, 76% complete.</i></p> <p><i>SPI 1.01, CPI 1.03</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<ul style="list-style-type: none"> • No anticipated changes at this time • Project schedule up to date • Time is the main constraint as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input. 				<p><i>I will schedule meetings with the committee and my internal team to review and receive approval on the data analysis and PPM#2 deliverables.</i></p>

One Page PM 686B Project Status Report Dashboard #3

Name: Anca Bertus

Date: 10/23/2015

Project Title: Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new project gate self-assurance framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with Subject Matter Experts at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope.</i></p>				<p><i>Key tasks completed:</i></p> <ul style="list-style-type: none"> <i>Data collection (interviews and literature reviews)& data analysis</i> <i>Deliverables for PPM #1 &2</i> <p><i>Key tasks started:</i></p> <ul style="list-style-type: none"> <i>Body for the final report & assurance review framework</i> <i>Deliverables for PPM#3</i>
Current Status			X	Forecast
<p><i>On track, 81% complete.</i></p> <p><i>SPI 1.0, CPI .98</i></p> <p><i>Originally, I underestimated the prep time for final report, thus the CPI is under 1 currently.</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<ul style="list-style-type: none"> <i>No anticipated changes at this time</i> <i>Project schedule up to date</i> <i>Time is the main constraint as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input.</i> 				<p><i>I will schedule meetings with the committee and my internal team to review and receive approval on the data analysis and PPM#3 deliverables.</i></p>

One Page PM 686B Project Status Report Dashboard #4

Name: Anca Bertus

Date: 11/12/2015

Project Title: Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Synopsis of Project				Progress Since Last Report
<p><i>This product orientated project will create a new project gate self-assurance framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with Subject Matter Experts at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope.</i></p>				<p><i>Key tasks completed:</i></p> <ul style="list-style-type: none"> <i>Data collection (interviews and literature reviews)& data analysis</i> <i>Draft report & assurance review framework which were reviewed with advisory committee, interviewees, and sponsor</i> <i>Deliverables for PPM #1 &2&3</i> <p><i>Key tasks started:</i></p> <ul style="list-style-type: none"> <i>Final report & assurance review framework</i> <i>Presentation</i> <i>Deliverables for PPM#4</i>
Current Status			X	Forecast
<p><i>On track, 84% complete.</i></p> <p><i>SPI 0.99, WPI 0.96</i></p> <p><i>Task 2.4.3 Provide research data & analysis update & draft report has been underestimated significantly originally, 5 hrs vs. actual 20 hrs.</i></p>				<p><i>Current schedule is in line with the baseline schedule set for the project and it shows I am on track to complete deliverables on time.</i></p>
Anticipated Changes/Key Risks/Corrective Actions				Key Takeaways/Where Help Needed
<ul style="list-style-type: none"> <i>No anticipated changes at this time</i> <i>Project schedule up to date</i> <i>Time is the main constraint as I have to ensure that I get my deliverables done on time and provide ample time to the committee for their input.</i> 				<p><i>I will schedule meetings with the committee and my internal team to review and receive additional feedback on PPM#4 deliverables.</i></p>

xi. Application & Performance of 3 Knowledge Areas

PPM1 - The 3 Project Management Knowledge areas identified as key to this project will be incorporated into the Project Management Plan.

➤ Project Integration Management

Application:

- Develop Project Charter
- Develop Project Management Plan

Performance Measurement:

- Perform scope of work per project management plan
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686A

➤ Project Time Management

Application:

- Define schedule activities
- Sequence the activities
- Estimate activity resources & durations
- Develop schedule

Performance Measurement:

- Control schedule by doing weekly updates
- Monitor project progress vs. baseline

➤ Project Communication Management

Application:

- Identify stakeholders
- Create a clear communication plan
- Distribute information timely as per plan

Performance Measurement:

- Keep a log of stakeholder expectations
- Report performance during class time.

PPM2 - Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Develop Project Charter
- Develop Project Management Plan

Performance Measurement:

- All project deliverables are complete to date
- Scope statement has been reviewed with committee and all comments incorporated
- All scope is clearly monitored and currently no additional scope is been added

➤ Project Time Management

Application:

- Define schedule activities
- Sequence the activities
- Estimate activity resources & durations
- Develop schedule and monitor

Performance Measurement:

- Schedule is on target with the baseline set
- 20% complete with an SPI of 1 and CPI of 1.17

➤ Project Communication Management

Application:

- Identify stakeholders
- Create a clear communication plan
- Distribute information timely as per plan

Performance Measurement:

- Meetings with committee members conducted to review on going deliverables
- No major comments were received to change the scope
- All comments have been incorporated into the documents
- Additional Stakeholders have been identified.

PPM3 – Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Develop Project Charter
- Develop Project Management Plan

Performance Measurement:

- All project deliverables are complete to date
- All scope is clearly monitored and currently no additional scope is been added
- Project management plan and all its subsidiary plans have been created and issued for review to the committee

➤ Project Time Management

Application:

- Define schedule activities
- Sequence the activities
- Estimate activity resources & durations
- Develop schedule and monitor

Performance Measurement:

- Schedule is on target with the baseline set
- 44% complete with an SPI of 1 and CPI of 1.17
- IRB documentation is taking longer than expected

➤ Project Communication Management

Application:

- Identify stakeholders
- Create a clear communication plan
- Distribute information timely as per plan

Performance Measurement:

- Meetings with sponsor and legal group on going
- No major comments were received to change the scope
- All comments have been incorporated into the documents
- No additional Stakeholders have been identified at this time.

PPM4 – Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Develop Project Charter
- Develop Project Management Plan

Performance Measurement:

- Project deliverables are completed per schedule
- Issued change order for one of the risks that have been encountered and received approval from primary advisor and sponsor
- Incorporated comments from advisory committee into the project management plan

➤ Project Time Management

Application:

- Define schedule activities
- Sequence the activities
- Estimate activity resources & durations
- Develop schedule and monitor

Performance Measurement:

- Schedule is on target with the baseline set
- 86% complete with an SPI of 1 and CPI of 1.17
- IRB documentation submitted per schedule and received approval

➤ Project Communication Management

Application:

- Identify stakeholders
- Create a clear communication plan
- Distribute information timely as per plan

Performance Measurement:

- Meetings with sponsor and legal group led to change request which was documented per CR#1
- All comments have been incorporated into the project management plan
- No additional Stakeholders have been identified at this time.

xii. Application & Performance of 3 Knowledge Areas for PM 686B

PPM1 - Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Follow the approved Project Management Plan
- Ensure all documentation is up to date

Performance Measurement:

- Perform scope of work per project management plan
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686B

Performance shown during PPM1:

- The execution of the project is per PMP at this stage
- No additional changes or risks have been identified

Lesson Learned:

- Project manager needs to plan ahead the interviews for the project in order to stay on track.

➤ Project Time Management

Application:

- Monitor and control schedule as its time critical for the deliverables to be completed by November timeframe in order to be able to graduate from the PM Master

Performance Measurement:

- Control schedule by doing tri-weekly updates
- Monitor project progress vs. baseline
- Maintain project execution on planned schedule by calculating SPI at each status report and show the variances

Performance shown during PPM1:

- All data collection including literature review and interviews were done over the summer per planned schedule without any delays and the schedule is been updated to reflect the progress
- A comparison of scheduled work hours vs. actual hours performed is done (227 vs. 211 hours)
- Currently, the project is at 74% completed, with an SPI of 1.01.

Lesson Learned:

- Ensure the project is baselined with resources for both capstone classes during PM 686A as otherwise a new baseline will have be done to add additional resources to the project.

➤ Project Communication Management

Application:

- Identify additional stakeholders
- Follow the approved communication plan
- Distribute information timely as per plan

Performance Measurement:

- Keep a log of stakeholder expectations
- Communicate with stakeholders per plan
- Report performance during class time

Performance shown during PPM1:

- Communicated with the interviews per plan during the summer
- Reviewed and signed the Expectations Agreement with Advisory Committee
- Reported project status during last class

Lesson Learned:

- Discuss upfront with the stakeholders the communication plan and expectations so no surprises are seen during project execution.

PPM2 - Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Follow the approved Project Management Plan
- Ensure all documentation is up to date

Performance Measurement:

- On time updates of all documents required including PMP
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686B

Performance shown during PPM2:

- All required PPM#2 documents have been created and updated
- Two additional risks have been identified

Lesson Learned:

- Continue performing per current schedule and plan.

➤ Project Time Management

Application:

- Monitor and control schedule as its time critical for the deliverables to be completed by November timeframe in order to be able to graduate from the PM Master

Performance Measurement:

- Control schedule by doing tri-weekly updates
- Monitor project progress vs. baseline
- Maintain project execution on planned schedule by calculating SPI at each status report and show the variances

Performance shown during PPM2:

- All data collection including literature review and interviews were done over the summer per planned schedule without any delays and the schedule is been updated to reflect the progress
- A comparison of scheduled work hours vs. actual hours performed is done (242 vs. 236 hours)
- Currently, the project is at 79% completed, with an SPI of 1.00 and WPI of 1.02.

➤ Project Communication Management

Application:

- Identify additional stakeholders
- Follow the approved communication plan
- Distribute information timely as per plan

Performance Measurement:

- Keep a log of stakeholder expectations
- Communicate with stakeholders per plan
- Keep track of # of times I am unprepared for the status report

Performance shown during PPM2:

- Reviewed current PPM deliverables with advisor
- Continue to be 0 for # of times I have not been prepped for the report

Lesson Learned:

- Continue to engage with the stakeholders and to be prepared for status reports as previously done.

PPM3 - Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Follow the approved Project Management Plan
- Ensure all documentation is up to date

Performance Measurement:

- On time updates of all documents required including PMP
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686B

Performance shown during PPM3:

- All required PPM#3 documents have been created and updated
- On track with approved plan
- All PPM deliverables have been integrated into the updated PMP

Lesson Learned:

- Continue performing per current schedule and plan.

➤ Project Time Management

Application:

- Monitor and control schedule as its time critical for the deliverables to be completed by November timeframe in order to be able to graduate from the PM Master

Performance Measurement:

- Control schedule by doing tri-weekly updates
- Monitor project progress vs. baseline
- Maintain project execution on planned schedule by calculating SPI at each status report and show the variances

Performance shown during PPM3:

- Task 2.4.3 *Provide research data & analysis update & draft report* has been underestimated significantly originally, 5 hrs vs. actual 20 hrs
- A comparison of scheduled work hours vs. actual hours performed is done (255 vs. 263 hours)
- Currently, the project is at 84% completed, with an SPI of 0.99 and WPI of 0.96.

➤ Project Communication Management

Application:

- Identify additional stakeholders
- Follow the approved communication plan

- Distribute information timely as per plan

Performance Measurement:

- Keep a log of stakeholder expectations
- Communicate with stakeholders per plan
- Keep track of # of times I am unprepared for the status report

Performance shown during PPM3:

- Reviewed current PPM deliverables with advisor and committee members
- Continue to be 0 for # of times I have not been prepped for the report

Lesson Learned:

- Ensure the meetings and discussions with the stakeholders are scheduled in advance.
- Continue to engage with the stakeholders and to be prepared for status reports as previously done.

PPM4 - Application & Performance of 3 Knowledge Areas

➤ Project Integration Management

Application:

- Follow the approved Project Management Plan
- Ensure all documentation is up to date

Performance Measurement:

- On time updates of all documents required including PMP
- Monitor and control project work thru change orders
- Perform closeout at end of PM 686B

Performance shown during PPM4:

- All required PPM#4 documents have been created and issued for review
- On track with approved plan
- All PPM deliverables have been integrated into the updated PMP
- The findings and the self-assurance framework have been vetted by the project stakeholders

Lesson Learned:

- Receiving feedback from the interviewers helped identify some gaps on the self-assurance framework, thus it is important to follow up with the stakeholders to ensure their full buy-into the results

➤ Project Time Management

Application:

- Monitor and control schedule as its time critical for the deliverables to be completed by November timeframe in order to be able to graduate from the PM Master

Performance Measurement:

- Control schedule by doing tri-weekly updates
- Monitor project progress vs. baseline
- Maintain project execution on planned schedule by calculating SPI at each status report and show the variances

Performance shown during PPM4:

- Some tasks have been underestimated originally, thus in order to stay on track with the PPM due date, I had to work during my vacation
- A comparison of scheduled work hours vs. actual hours performed is done (278 vs. 292 hours)
- Currently, the project is at 92% completed, with an SPI of 0.98 and WPI of 0.94

Lesson Learned:

- The schedule updates and maintenance needs to be a weekly activity in order to assess if the project is on time and cost or is on derailing path

➤ Project Communication Management

Application:

- Identify additional stakeholders
- Follow the approved communication plan
- Distribute information timely as per plan

Performance Measurement:

- Keep a log of stakeholder expectations
- Communicate with stakeholders per plan
- Keep track of # of times I am unprepared for the status report

Performance shown during PPM4:

- Reviewed current PPM deliverables with advisor and committee members during week of November 16th
- Continue to be 0 for # of times I have not been prepped for the status report

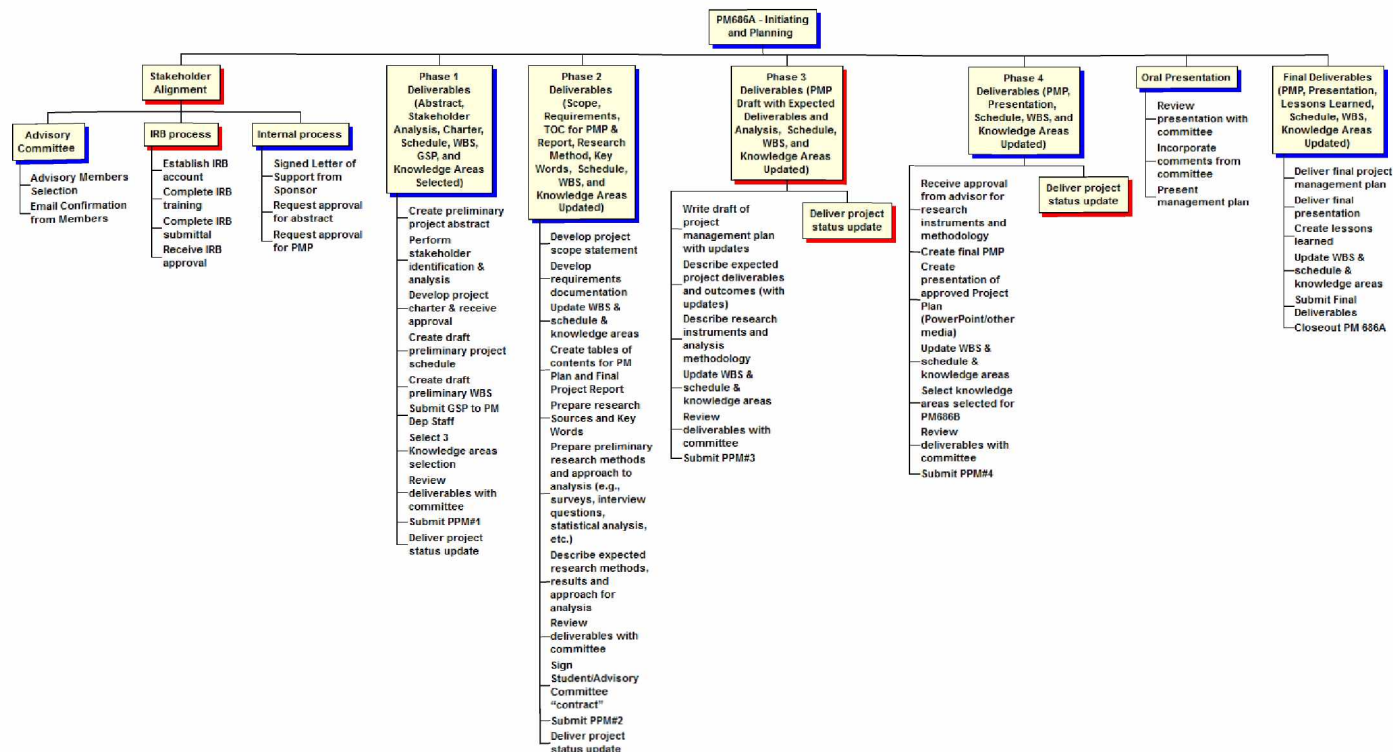
Lesson Learned:

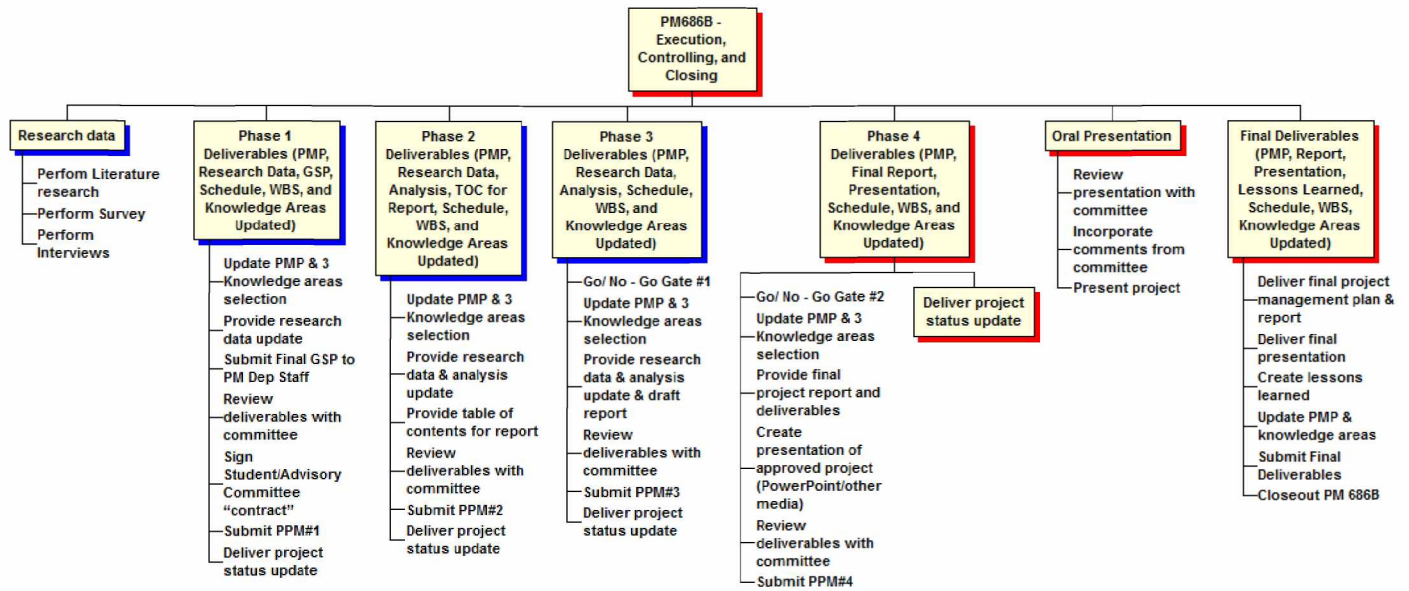
- Continue to engage with the stakeholders and to be prepared for status reports as previously done
- Provide documentation for review at least 3 days in advance of meeting time

xiii. Project Schedule

ID	Task Name	Duration	Milestones	Finish	Predecessors	Actual Finish	% Work Complete	Work	Baseline Work	Actual Work	Resource Names	SPI	CPI	1st Quarter
0	PM 686	239.38 days	Wed 1/7/15	Tue 12/8/15			NA 100%	325.13 hrs	303.53 hrs	325.13 hrs		0.99	0.94	
1	1 PM686A - Initiating and Planning	79 days	Wed 1/7/15	Mon 4/27/15			Mon 4/27/15 100%	163.53 hrs	163.53 hrs	163.53 hrs		1	1	
2	1.1 Stakeholder Alignment	68 days	Wed 1/7/15	Fri 4/10/15			Fri 4/10/15 100%	18.03 hrs	18.03 hrs	18.03 hrs		1	1	
15	1.2 Phase 1 Deliverables (Abstract, Stakeholder Analysis, Charter, Schedule, WBS, GSP, and Knowledge Areas Selected)	11 days	Fri 1/16/15	Fri 1/30/15			Fri 1/30/15 100%	22 hrs	22 hrs	22 hrs		1	1	
26	1.3 Phase 2 Deliverables (Scope, Requirements, TOC 15 days for PMP & Report, Research Method, Key Words, Schedule, WBS, and Knowledge Areas Updated)	15 days	Mon 2/2/15	Fri 2/20/15	24		Fri 2/20/15 100%	19 hrs	19 hrs	19 hrs		1	1	
38	1.4 Phase 3 Deliverables (PMP Draft with Expected Deliverables and Analysis, Schedule, WBS, and Knowledge Areas Updated)	24 days	Mon 2/23/15	Fri 3/27/15	36		Fri 3/27/15 100%	61 hrs	61 hrs	61 hrs		1	1	
47	1.5 Phase 4 Deliverables (PMP, Presentation, Schedule, WBS, and Knowledge Areas Updated)	23 days	Mon 3/16/15	Wed 4/15/15	44		Wed 4/15/15 100%	22 hrs	22 hrs	22 hrs		1	1	
57	1.6 Oral Presentation	11.13 day	Fri 4/3/15	Mon 4/20/15			Mon 4/20/15 100%	8.5 hrs	8.5 hrs	8.5 hrs		1	1	
61	1.7 Final Deliverables (PMP, Presentation, Lessons Learned, Schedule, WBS, Knowledge Areas Updated)	5 days	Tue 4/21/15	Mon 4/27/15	60		Mon 4/27/15 100%	13 hrs	13 hrs	13 hrs		1	1	
68	2 PM686B - Execution, Controlling, and Closing	160.38 days	Tue 4/28/15	Tue 12/8/15	61		NA 100%	161.6 hrs	140 hrs	161.6 hrs		0.97	0.87	
69	2.1 Research data	90.77 day	Tue 4/28/15	Tue 9/1/15	61		Tue 9/1/15 100%	47 hrs	50 hrs	47 hrs		1	1.06	
73	2.2 Phase 1 Deliverables (PMP, Research Data, GSP, Schedule, WBS, and Knowledge Areas Updated)	14 days	Tue 9/1/15	Fri 9/18/15	69		Fri 9/18/15 100%	9 hrs	13 hrs	9 hrs		1	1.44	
81	2.3 Phase 2 Deliverables (PMP, Research Data, Analysis, TOC for Report, Schedule, WBS, and Knowledge Areas Updated)	15.8 days	Thu 9/17/15	Fri 10/9/15	79		NA 100%	16 hrs	15 hrs	16 hrs		0.93	0.88	
88	2.4 Phase 3 Deliverables (PMP, Research Data, Draft Report, Schedule, WBS, and Knowledge Areas Updated)	20 days	Fri 10/9/15	Fri 11/6/15	86		NA 100%	27 hrs	13 hrs	27 hrs		0.92	0.44	
95	2.5 Phase 4 Deliverables (PMP, Final Report, Presentation, Schedule, WBS, and Knowledge Areas Updated)	16 days	Fri 11/6/15	Fri 11/27/15	93		NA 100%	28.6 hrs	23 hrs	28.6 hrs		0.96	0.77	
104	2.6 Oral Presentation	10 days	Tue 11/17/15	Mon 11/30/15			Mon 11/30/15 100%	20 hrs	6 hrs	20 hrs		0.72	1	
108	2.7 Final Deliverables (PMP, Report, Presentation, Lessons Learned, Schedule, WBS, Knowledge Areas Updated)	5.38 days	Tue 12/1/15	Tue 12/8/15	107		NA 100%	14 hrs	20 hrs	14 hrs		0	0	

xiv. Work Breakdown Structure





Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Project Charter

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MSPM Program

PROJECT INFORMATION

		DATE PREPARED:	1/25/2015
PROJECT NAME:	Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects	DATE MODIFIED:	9/14/2015
PROJECT SPONSOR:	Mark McClellan	PHONE:	265-1052
PROJECT MANAGER:	Anca Bertus	PHONE:	263-4152
SCHEDULED START DATE:	2/1/2015	SCHEDULED COMPLETION DATE:	12/8/2015

PROJECT OVERVIEW

Major capital projects can fail or have poor outcomes including significant cost and schedule overruns if the projects have not been through a comprehensive project approval gate assurance review. Subject Matter Experts (SMEs) must be levered in a manner wherein all design, construction, commissioning, and operational issues (including external factors such as extreme weather conditions) have been formally and properly addressed. Given the current economic climate, a more time and cost efficient local assurance review framework would increase value derived from local assurance reviews.

This project will create a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery. The assurance process will be a “cold-eyes” review with SMEs at the Define and Execute approval gate to ensure the project team has considered all aspects of the project readiness and to assure the project will be successfully executed on budget, on cost, and within scope. While external consultants are available to conduct such reviews, this process will be primarily designed as an internal local assurance review process in order to generate a good improvement cycle employing internal local SMEs who are accustomed to and familiar with the execution of arctic projects, and familiar with prior project successes and failures. There are both cost efficiencies to be gained with this approach and leveraging local expertise actually provides better quality in the process.

The project will include a literature review of assurance review processes followed by an analysis of the interviews conducted with local Alaskan project professionals experienced with major projects delivery using interview guidelines written for this project.

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The project is phased to follow University of Alaska Anchorage (UAA) Master of Science in Project Management (MSPM) Capstone class durations as listed:

- PM 686A Initiating and Planning (January 16, 2015 thru April 29, 2015)
- PM 686B Executing, Controlling, and Closing (September 04, 2015 thru December 07, 2015).

Contents of each class are listed:

PM 686A Initiating and Planning

- Stakeholder Identification and Analysis
- Project Charter
- Preliminary project schedule/ Gantt chart with updates
- Preliminary Work Breakdown Structure (WBS) with updates
- 200 word Project Abstract with updates
- Letter of support from project sponsor
- Preliminary Graduate Studies Plan (GSP) (including written agreement from advisor/committee members)
- Selection of 3-4 Knowledge Areas used during project to demonstrate mastery, how they will be applied to the project and how the performance will be measured. (with update)
- Project scope statement
- Requirements documentation (stakeholder requirements)
- Tables of contents for PM Plan and Final Project Report
- Research Sources and Key Words
- Preliminary research methods and approach to analysis (e.g., surveys, interview questions, statistical analysis, etc.)
- Description of expected research methods, results and approach for analysis
- Signed Student/Advisory Committee "contract"
- Written draft of project management plan with updates
- Description of expected project deliverables and outcomes (with updates)
- Advisor- approved research instruments and analysis methodology. Approval must be documented in email.
- University of Alaska Anchorage (UAA) IRB submittal
- Professional draft presentation of project objectives, charter, project management plan description of project deliverables
- Presentation of approved Project Plan. PowerPoint/other media. (with updates)
- Oral Presentation
- Separate 2-3 page summary narrative of project lessons learned.
- Separate 2-3 page descriptive narrative of how focused knowledge areas were applied and measured on project.

PM 686B Executing, Controlling, Closing

- Change Control Process, Project progress method and status (e.g. EVM, other)
- Project Management Plan updates (using change control process)
- Updates on requirements traceability matrix
- Updates on WBS
- Updates on schedule/Gantt chart
- Updates on risk register
- Risk response implementation

Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Project Charter

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- Project deliverables status update
- Data collection/research updates (should have all raw data at this point)
- 3-4 Knowledge Areas processes applied and measured during project to demonstrate mastery (with updates)
- Final signed GSP directly to PM Department Staff
- Signed Student/Advisory Committee "contract"
- Updates on abstract
- Updates on table of contents
- Updates on research sources and key words
- Research results with validated research analysis (needs advisor approval)
- Preliminary conclusions and project deliverables
- Draft presentation
- Complete and properly formatted project report and final project deliverables (with updates)
- Oral Presentation
- Final report, to include two hard copies of complete report, appendices, mandatory deliverables and PowerPoint presentation. One copy will be placed in tabbed binder provided by the Department for MSPM library with a CD of complete copy of electronic files.
- 2-3 page summary narrative of project lessons learned included in separate section of project binder.
- Narrative on 3-4 Knowledge Areas processes applied and measured during project to demonstrate mastery. Performance measured and lessons learned.

PROJECT OBJECTIVES	
OBJECTIVE	CRITERIA FOR EVALUATION
Create a new project gate self-assurance review framework applicable to major Alaska Oil and Gas companies to improve projects delivery	Approval by advisory committee and sponsor

PROJECT SCOPE	
IN SCOPE	OUT OF SCOPE
Analyze current assurance review processes	Suggestions to enhance companies corporate assurance review processes
Define questionnaire for Alaska SMEs that have been thru assurance reviews	Review assurance process outside of Oil & Gas Industry
Conduct interviews	Conduct interviews outside oil and gas industry
Compile and evaluate interview results	
Develop a standard procedure for the self-assurance process for Alaska Major Oil & Gas projects	Implementation of the self-assurance process in Alaska O&G companies

PROJECT DELIVERABLES
Written report
Self-assurance process framework

Project Charter

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MAJOR MILESTONES	
MILESTONE/ DELIVERABLE	TARGET DATE
PM 686A Initiating and Planning (January 16, 2015 thru April 29, 2015)	
Sponsor Letter Signed	January 27, 2015
Advisory Committee Selected and Approved	January 27, 2015
Submit PPM#1	January 30, 2015
Submit PPM#2	February 20, 2015
Submit PPM#3	March 13, 2015
Go Decision #1	March 18, 2015
IRB Submittal	March 27, 2015
Submit PPM#4	April 10, 2015
IRB Approval	April 10, 2015
Go Decision #2	April 15, 2015
Final Oral Presentation	April 20, 2015
Final Project Deliverables	April 27, 2015
PM 686B Executing, Controlling, and Closing (September 04, 2015 thru December 07, 2015)	
Submit PPM#1	September 18, 2015
Submit PPM#2	October 9, 2015
Submit PPM#3	November 6, 2015
Go Decision #1	October 14, 2015
Submit PPM#4	November 20, 2015
Go Decision #2	November 25, 2015
Final Oral Presentation	November 30, 2015
Final Project Deliverables	December 7, 2015

ASSUMPTIONS
<ul style="list-style-type: none"> • Project Manager has access to necessary software programs (Microsoft Office, WBS Chart Pro, Blackboard, Google Docs, etc.). • Advisors will review and give constructive feedback on draft project deliverables. • This project assumes the SMEs are receptive and willing to participate in the interview process. • Project Stakeholders have adequate time to review and approve project deliverables.

Project Charter

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CONSTRAINTS	
<ul style="list-style-type: none"> • Project Progress Milestone (PPM) dates as specified in 686A and 686B syllabi (see attached) • Advisor and committee members time availability • SMEs time availability and buy in the new process. 	

PROJECT RISKS				
RISKS	IMPACT	MITIGATION STRATEGY	CRITICALITY	PROBABILITY
1. Project Manager time availability	Can cause class repeat/ project failure	<ul style="list-style-type: none"> • Dedicate time to complete PPM deliverables. 	Severe	50%
2. SME participation	Can cause project failure	<ul style="list-style-type: none"> • Coordinate with local Alaskan project professionals to acquire support. 	Severe	50%
3. Adequate interview questions	Can cause additional project work thru IRB process	<ul style="list-style-type: none"> • Generate questions with qualified SMEs • Coordinate with committee advisors 	Medium	30%
4. Critical Resources	Can cause project delays	<ul style="list-style-type: none"> • Review project schedule with committee team to acquire approval • Generate Student/Advisory Committee Contract 	Medium	30%
5. Acquire Project Management Software	Can cause project delays	<ul style="list-style-type: none"> • Download student version thru the University 	Medium	10%

Project Charter

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KEY STAKEHOLDERS

PROJECT SPONSORS (SEE ROLES & RESPONSIBILITIES BELOW)
--

MM Project Engineering Manager

PROJECT MANAGEMENT (SEE ROLES & RESPONSIBILITIES BELOW)
--

Anca Bertus Project Manager

TEAM (SEE ROLES & RESPONSIBILITIES BELOW)
--

Roger Hull Primary Advisor

Steve Hatter Committee Member

William Spindle Committee Member

Project Gate Self-Assurance Review Framework for Major Alaska Oil and Gas Projects

Project Charter

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ROLES & RESPONSIBILITIES		
ROLES	RESPONSIBILITIES	CONTACT PERSON
PROJECT SPONSOR	<ul style="list-style-type: none"> • Authorize & approve project • Approve project deliverables • Authorize project resources • Resolve issues 	MM
PROJECT MANAGER	<ul style="list-style-type: none"> • Coordinate team activities • Project planning • Monitor project progress • Resolve issues • Report project progress to the Project Sponsor • Communicate issues to the Project Sponsors for resolution 	Anca Bertus
IRB	<ul style="list-style-type: none"> • Approval for survey questionnaire & interview 	UAA IRB Department
TEAM	<ul style="list-style-type: none"> • Serve as technical experts and share knowledge • Participate in team meetings & discussions • Learn from other technical experts on the team to gain an understanding of the system • Apply technical expertise and judgment in the development of & completion of project deliverables • Resolve Issues. 	SMEs Project teams Advisory Committee Roger Hull Bill Spindle Steve Hatter

PROJECT AUTHORITY			
APPROVER NAME	TITLE	SIGNATURE	DATE
Mark McClellan	Project Engineering Manager (Sponsor)		
Anca Bertus	Project Manager		

January 27, 2015

University of Alaska Anchorage
Project Management Department
University Center, Room 155
3901 Old Seward Highway
Anchorage, AK 99503

Attn: Mr. Roger Hull

Re: Support letter for Anca Bertus' PM686A Final Project

Dear Mr. Hull:

The purpose of this letter is to convey my support for Anca Bertus' PM 686A final project: "Self-Assurance Review Process for Alaska Capital Projects within \$50 – 150 Millions Total Installed Cost."

The self-assurance process will assess the readiness for gate approval for projects ranging from \$50 – 150 Millions with the aim for a consistent quality and approach. This process will ensure a project is on track to deliver or will recommend a project to be re-scoped.

This project is part of our business goals for this year and we look forward to a new fully compliant self-assurance review process fit for purpose for our routine type projects within the Alaska Business Unit.

If you need any additional information, please contact me regarding Anca's final project.

Sincerely,



Mark McClellan
Project Engineering Manager
ConocoPhillips Alaska Inc.
700 G Street
Anchorage, AK 99501
(907) 265-1052 - Office
Mark.A.McClellan@ConocoPhillips.com